

4-2018

# The impact of Transformational and Transactional Leadership styles on Organizational learning in health care context

Nadia Mutref Saeed Al Jaberi

Follow this and additional works at: [https://scholarworks.uaeu.ac.ae/all\\_dissertations](https://scholarworks.uaeu.ac.ae/all_dissertations)

Part of the [Business Commons](#)

---

## Recommended Citation

Al Jaberi, Nadia Mutref Saeed, "The impact of Transformational and Transactional Leadership styles on Organizational learning in health care context" (2018). *Dissertations*. 76.

[https://scholarworks.uaeu.ac.ae/all\\_dissertations/76](https://scholarworks.uaeu.ac.ae/all_dissertations/76)

This Dissertation is brought to you for free and open access by the Electronic Theses and Dissertations at Scholarworks@UAEU. It has been accepted for inclusion in Dissertations by an authorized administrator of Scholarworks@UAEU. For more information, please contact [fadl.musa@uaeu.ac.ae](mailto:fadl.musa@uaeu.ac.ae).

**UAEU**



جامعة الإمارات العربية المتحدة  
United Arab Emirates University

United Arab Emirates University

College of Business and Economics

THE IMPACT OF TRANSFORMATIONAL AND  
TRANSACTIONAL LEADERSHIP STYLES ON ORGNIZATIONAL  
LEARNING IN HEALTH CARE CONTEXT

Nadia Mutref Saeed Mutref Al Jaberi

This dissertation is submitted in partial fulfilment of the requirements for the degree  
of Doctorate of Business Administration

Under the Supervision of Dr. Abdul Karim Khan

April 2018

### Declaration of Original Work

I, Nadia Mutref Saeed Mutref Al Jaberi, the undersigned, a graduate student at the United Arab Emirates University (UAEU), and the author of this dissertation entitled "*The Impact of Transformational and Transactional Leadership Styles on Organizational Learning in Health Care Context*", hereby, solemnly declare that this dissertation is my own original research work that has been done and prepared by me under the supervision of Dr. Abdul Karim Khan, in the College of Business and Economics at UAEU. This work has not previously been presented or published, or formed the basis for the award of any academic degree, diploma or a similar title at this or any other university. Any materials borrowed from other sources (whether published or unpublished) and relied upon or included in my dissertation have been properly cited and acknowledged in accordance with appropriate academic conventions. I further declare that there is no potential conflict of interest with respect to the research, data collection, authorship, presentation and/or publication of this dissertation.

Student's Signature: \_\_\_\_\_



Date: 05/05/2018

Copyright © 2018 Nadia Mutref Saeed Mutref Al Jaber  
All Rights Reserved

## Advisory Committee

1) Advisor: Dr. Abdul Karim Khan

Title: Assistant Professor

Department of Business Administration

College of Business and Economics

2) Co-advisor: Prof. Riyad Aly Mohammed Eid

Title: Professor

Department of Business Administration

College of Business and Economics

## Approval of the Doctorate Dissertation

This Doctorate Dissertation is approved by the following Examining Committee Members:

- 1) Advisor (Committee Chair): Dr. Abdul Karim Khan

Title: Assistant Professor

Department of Business Administration

College of Business and Economics

Signature 

Date: 16<sup>th</sup> April 2018

- 2) Member: Dr. Rashed Al Zahmi

Title: Associate Professor

Department of Business Administration

College of Business and Economics

Signature 

Date: 16<sup>th</sup> April 2018

- 3) Member: Dr. Abdullah Abdullah

Title: Associate Professor

Psychology and Counselling

College of Humanities and Social Science

Signature 

Date: 16<sup>th</sup> April 2018

- 4) Member: Dr. Doug Goodman

Professor

School of Economic, Political and Policy Sciences

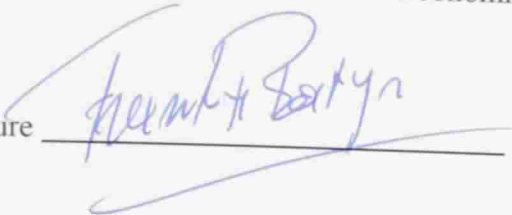
University of Texas, Dallas, USA

Signature 

Date: 16<sup>th</sup> April 2018

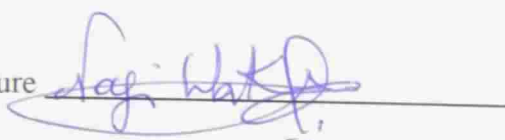
This Doctorate Dissertation is accepted by:

Dean of the College of Business and Economics: Professor Frank Bostyn

Signature 

Date 9/5/2018

Dean of the College of Graduate Studies: Professor Nagi T. Wakim

Signature 

Date 10/5/2018

## **Abstract**

The aim of this research is to examine the impact of leadership styles on organizational learning in health care context at Abu Dhabi Health Services Company (SEHA) in Al Ain region. The study uses a quantitative methodology to answer the research questions. The findings suggest that both transactional and transformational leadership styles are associated with organizational learning. The transformational leadership is linked with organizational learning through learning goal orientation and trust in leaders whereas transactional leadership style is linked with organizational learning through performance goal orientation. The research findings can help senior executives to put strategic plans for their organizational learning development. Also, the research is expected to provide a baseline for health care policy makers on how they can initiate and create a context of organizational learning through enhancements of the leadership role.

**Keywords:** organization learning, transformational leadership, transactional leadership, health care context, Abu Dhabi Health Services Company (SEHA).



## Title and Abstract (in Arabic)

### دور القيادة التحويلية والقيادة التبادلية على التعلم المؤسسي في سياق الرعاية الصحية

#### الملخص

الهدف من هذا البحث هو دراسة تأثير أساليب القيادة على التعلم المؤسسي في سياق الرعاية الصحية في شركة أبوظبي للخدمات الصحية (صحة) في منطقة العين حيث تم استخدام منهجية الطريقة الكمية للإجابة على أسئلة البحث. وتشير النتائج إلى أن كل من أساليب القيادة التحويلية والقيادة التبادلية تؤثر على التعلم المؤسسي. وترتبط القيادة التحويلية بالتعلم المؤسسي من خلال توجيه نمط هدف التعليم المستمر ومن خلال تعزيز الثقة في القائد، في حين أن أسلوب القيادة التبادلية يؤثر في التعلم المؤسسي من خلال التوجه نحو أهداف الأداء.

نتائج هذا البحث مفيدة للمدراء التنفيذيين لوضع الخطط الاستراتيجية لتطوير التعلم المؤسسي، وأيضاً يمكن استخدام نتائج هذا البحث كخط أساس لصانعي سياسات الرعاية الصحية وصناع القرار حول كيفية خلق بيئة للتعلم المؤسسي من خلال تعزيز الدور القيادي.

**مفاهيم البحث الرئيسية:** التعلم المؤسسي، القيادة التحويلية، القيادة التبادلية، سياق الرعاية

الصحية، شركة أبوظبي للخدمات الصحية (صحة).

## **Acknowledgements**

My thanks go to Dr. Abdul Karim Khan whose support and guidance enabled me to further enhance my research skills and develop the required knowledge in the related field.

I would like to thank my committee for their guidance, support, and assistance throughout my preparation of this dissertation. Special thanks go to my beloved people; who helped me throughout this journey for their endless support.

## Dedication

*To my beloved people, who always believed in me, sometimes more than I personally do, my extended family, my coach, and friends grateful for your support throughout my doctorate journey, thank you for helping me to bring my big dream to reality.*

## Table of Contents

Title .....	i
Declaration of Original Work .....	ii
Copyright .....	iii
Advisory Committee .....	iv
Approval of the Doctorate Dissertation .....	v
Abstract .....	vii
Title and Abstract (in Arabic) .....	viii
Acknowledgements .....	ix
Dedication .....	x
Table of Contents .....	xi
List of Tables.....	xiv
List of Figures .....	xv
List of Abbreviations.....	xvi
Chapter 1: Introduction .....	1
1.1 Research Background and Overview .....	1
1.2 Motivation for the Research .....	9
1.3 Research Questions and Objectives .....	12
1.4 Contributions and Significance .....	14
1.5 Summary of the Chapter.....	18
Chapter 2: Literature Review .....	19
2.1 Introduction .....	19
2.2 Organisational Learning Overview and Conceptualisation.....	19
2.3 Leadership Influence on Organisational Learning .....	23
2.4 Transformational Leadership and Organisational Learning .....	29
2.5 Transformational Leadership and Trust in the Leader .....	34
2.6 Trust in the leader and Psychological Safety .....	39
2.7 Psychological Safety and Organisational Learning.....	42
2.8 Transformational Leadership and Psychological Safety .....	46
2.9 Psychological Safety and Learning Goal Orientation .....	50
2.10 Transformational Leadership and Learning Goal Orientation .....	53
2.11 Learning Goal Orientation and Organisational Learning.....	57
2.12 Transactional Leadership and Organisational Learning.....	61

2.13 Transactional Leadership and Performance Goal Orientation .....	64
2.14 Performance Goal Orientation and Organisational Learning .....	69
2.15 Research Model .....	72
Chapter 3: Research Methodology .....	73
3.1 Introduction .....	73
3.2 Research Epistemology .....	73
3.3 Study Design .....	75
3.4 Measures/Instruments used to operationalise the Research Model .....	76
3.5 Control Variables .....	82
3.6 Research Procedures and Data Source .....	83
3.7 Sample Characteristics .....	84
3.8 Chapter Summary .....	85
Chapter 4: Data Analyses and Results .....	87
4.1 Introduction .....	87
4.2 Preliminary Data Analyses .....	87
4.2.1 Missing Values Analysis .....	87
4.2.2 Aberrant Values .....	88
4.2.3 Detecting Outliers/Testing Normality .....	89
4.2.4 Multicollinearity .....	96
4.3 Confirmatory Factor Analysis .....	96
4.3.1 CFA for Dependent and Independent Variables .....	99
4.3.1.1 Reliability and Validity of Dependent and Independent Variables .....	102
4.3.2 CFA of Mediating Variables .....	103
4.3.2.1 Reliability and Validity of Mediators .....	106
4.4 Common Method Bias (CMB) .....	107
4.4.1 Harman's Single Factor .....	108
4.4.2 Common Latent Factor .....	109
4.5 Descriptive Statistics and Correlations .....	109
4.6 Hypotheses Testing .....	112
4.6.1 Structural Regression (SR) Models .....	112
4.6.2 Direct Effect Hypotheses .....	114
4.6.3 Mediation Hypotheses .....	115
4.7 Chapter Summary .....	117
Chapter 5: Discussion and Conclusion .....	119

5.1 Discussion of the Results.....	119
5.2 Reasons for Non-Significant Findings .....	127
5.3 Theoretical Implications .....	132
5.4 Managerial Implications .....	133
5.5 Limitations and Future Directions.....	137
5.6 Summary .....	139
References .....	140
Appendices .....	167
Appendix 1: Research Survey .....	167
Appendix 2: Multifactor Leadership Questionnaires License.....	182

## List of Tables

Table 1: Achievement Goals and Achievement Behavior .....	54
Table 2: Generalization of Model to External Attributes.....	56
Table 3: The Impact of Leadership Styles on Knowledge.....	63
Table 4: Two Goal Orientations and their Approach and Avoidance States .....	71
Table 5: Sample Characteristics of Respondents .....	85
Table 6: Case-wise Missing Value Analysis.....	88
Table 7: Descriptive Statistics (Before removing Outliers).....	90
Table 8: Descriptive Statistics (After Removing Outliers).....	93
Table 9: Multicollinearity Statistics .....	96
Table 10: Fit Indices with their Threshold Values.....	98
Table 11: Fit Indices of CFA Model of Dependent and Independent Variables.....	100
Table 12: Factor Loadings of Dependent and Independent Variables.....	101
Table 13: Reliability and Validity of Dependent and Independent Variables .....	103
Table 14: Fit Indices of CFA Model of Mediators .....	104
Table 15: Factor Loadings of Mediators .....	105
Table 16: Reliability and Validity of Mediators .....	107
Table 17: Harman's Single Factor Test .....	109
Table 18: Descriptive Statistics and Correlations .....	111
Table 19: Fit Indices of SR Model.....	112
Table 20: Testing Direct Hypotheses .....	115
Table 21: Indirect Effects of Process and Macro Models .....	117

## List of Figures

Figure 1: Research Model .....	72
Figure 2: CFA Model of Dependent and Independent Variables .....	102
Figure 3: CFA for Mediating Variable .....	106
Figure 4: SR Model.....	113



## List of Abbreviations

AHS	Ambulatory Health Services
ASV	Average Shared Squared Variance
AVE	Average Variance Extracted
B	Beta
CEO	Chief Executive Officer
CFA	Confirmatory Factor Analysis
CFI	Comparative Fit Index
CMB	Common Method Bias
CMIN	Normed-Chi Square
CMIN/df	Minimum Discrepancy Divided by its Degree of Freedom
CR	Composite Reliability
EFA	Exploratory Factor Analysis
GFI	Goodness-of-Fit Index
HR	Human Resource
IT	Information Technology
LGO	Learning Goal Orientation
LLCI	Lower Level Class Interval
LMX	Leader Member Exchange
MLQ	Multifactor Leadership Questionnaires
MSV	Maximum Shared Squared Variance
OL	Organizational Learning
P	P-value
PGO	Performance Goal Orientation

PS	Psychological Safety
RMSEA	Root Mean Square Error of Approximation
SD	Standard Deviation
SD	Standard Deviation
SE	Standard Error
SEHA	Abu Dhabi Health Service Company
SEM	Structural Equation Modelling
SR	Structure Regression
TLI	Tucker-Lewis Index
TR	Transformational Leadership
TRL	Transactional Leadership
Trust	Trust in the Leader
UAE	United Arab Emirates
ULCI	Upper level Class Interval

## **Chapter 1: Introduction**

### **1.1 Research Background and Overview**

Nowadays, it is essential to consider the determinants of organisational learning to survive and adapt with today's rapid changes and dynamic business revolutions. Learning in organisations is a process that is operated from within its employees and transforms collectively between them via their applied missions and tasks. While information is being exchanged, knowledge is being created, spread and then cascaded into different levels throughout the organisation to create a learning environment through rules, policies and codes (Scott, 2011). The nature of organisational learning is still ambiguous in terms of its contributing factors and cultural differences; however, there are a lot of previous studies on those topics but the knowledge is not cumulative and differs from one context to another (Lähteenmäki, Toivonen, & Mattila, 2001).

Two of the most important and vital sectors in the United Arab Emirates (UAE) are the education and health care sectors and the UAE government considers these two sectors as being its high and top priorities when planning strategies and allocating budgets. Since independence in 1971, the UAE has established a recognised health care infrastructure of international standards that experiences similar issues that most developed countries are confronting. The UAE health care sector is divided up into private and public health care providers. The public entities are regulated by federal and governmental entities on the emirates' level as the Ministry of Health, Dubai Health Authority, Health Authority Abu Dhabi and Abu Dhabi Health Services Company (SEHA). Health care revolution is increasing rapidly and is becoming included in the government's diversification plans. The

UAE Vision 2021 states that “the UAE [will] ... invest continually to build world-class health care infrastructure, expertise and services in order to fulfil citizens’ growing needs and expectations” (UAE 2021 vision, available from <http://www.vision2021.ae>). Further, the Emirate of Abu Dhabi explains in their Vision 2030 plan that “The growth of the medical sector is dependent on large investments in technology, which Abu Dhabi is in a position to make ... Abu Dhabi will have to attract qualified doctors and medical scientists as well as train local medical staff in order to develop this sector sufficiently.” (Abu Dhabi Economic vision 2030, available from <http://www.government.ae>).

What makes the UAE unique in their health care development is that the regulators and health care providers at the emirate’s level are inserting governmental visionary in their strategies and investments. Part of the health care investments is the partnership with US world class brands such as Johns Hopkins and the Cleveland clinic to improve the quality of the provided services (U.S.-U.A.E. Business Council, 2014, available from <http://www.usuaebusiness.org>).

The UAE has the second largest economy in the Arab world (after the Kingdom of Saudi Arabia). The economy is still mainly oil based, with one third of the gross domestic product coming from oil revenues. The variations in oil prices, which decreased approximately 49% between 2014 and 2015, contributed in decreasing revenue approximately 51.5% in 2015 compared to the oil revenues recorded in 2014. The financial policy of the UAE in 2015 and 2016 was focused on investments that support the Emirate’s growth and the sustainability of human development that supports the diversity of the Emirates’ revenue. Government expenditures declined from approximately 492.2 billion dirhams (134.02 United

States billion dollars) in 2014 to 401.0 billion dirhams (109.19 United States billion dollars) in 2015 with a decline ratio of -18.5%. The highest expenditures were in the health, education, social care, infrastructure, and strategic projects in tourism and industry sectors, which would enhance the diversity of income resources and motivate knowledge creativity and innovation (Annual Economic Report 2016, <http://www.economy.gov.ae>).

Based on the UAE 2021 vision to achieve a knowledge economy based on research and innovation, the government announced the ‘‘Supreme Policy for Science, Technology and Innovation’’, which includes 100 initiatives in the health, education, energy, transport, water and technology sectors with allocated investments of 300 billion dirhams in value (UAE 2021 vision, available from <http://www.vision2021.ae>). In addition, the government wanted to increase investment in scientific research by approximately three times until 2021 (Annual Economic Report 2016, available from <http://www.economy.gov.ae>).

Because of the tremendous economic transformation in the UAE after oil exploration in the 20<sup>th</sup> century, in addition to the huge transitional events across all sectors especially in the health sector, there has been a need for promoting learning as a strategy to manage change and competition. Moreover, today’s business requires innovation in different aspects of business. Therefore, there is an essential need to capture the fundamentals of building an organisational learning framework to stay parallel with today’s demand. Many previous studies have shown that exchanging knowledge leads to improvement in a firm’s performance, sustainability and innovation (Alegre and Chiva, 2008; Svetlik, Stavrou-Costea, & Lin, 2007; Tohidi et al., 2012).

Many researchers argued knowledge as a basis for competitive advantage (Goh & Richards, 1997; Goh, 1998). In contrast, several organisations consider knowledge transfer as a continuous problem, which is why it needs to be better understood (Weldy & Gillis, 2010). However, there is a lack of solid empirical studies in the UAE context that has investigated organisational learning in health care entities. There are a lot of prior studies that examined the antecedents of organisational learning. Maani and Benton (1999) agreed with Senge et al. (1994) that , a shared vision among the employees is an important tool to promote organisational learning. It is aligning all employees to work together in the same direction to achieve common goals (Slater & Narver, 1995). Thus, shared vision has been identified as an important factor in creating organisational learning; however, it is not the only factor that facilitates adapting and competing with the rapid changing environments (Dess & Picken, 2000). One of the reasons behind the failure of achieving successful organisational learning is the lack of a shared vision (Fahey & Prusak, 1998).

Several studies have stated that it is important to align organisational learning with the presence of the ability to transform and change by oneself (Bahlmann, 1990; McGill et al., 1992; Swieringa & Wierdsma, 1992). This process has been identified as being 'proactive' in that the individual is able to not only adapt to environmental changes, but can also produce learning and implement the new approaches accordingly. Therefore, organisational learning can be built from internal proactivity from within their systems and human resources, not only from external environmental forces. Other researchers have agreed that the environment is one of the factors that promote organisational learning by aligning the processes and procedures to the competitive changing environmental conditions that foster learning

(Fiol & Lyles, 1985). Interpreting the environment and initiating strategies to work parallel in dynamic environments are part of the process to create organisational learning. The type of environment is very important as it determines the type of learning. In a stable environment, relatively adaptive learning is suitable as it is concerned with how best the individual can accomplish a specific goal with the same performance level and without changing the existing norms. This approach might enable existing capabilities to be improved (Lant & Mezias, 1990; McGill et al., 1992). In a complex environment, there is a need to change and restructure the strategies/norms to adapt to the changes, which is this a generative learning style (Argyris & Schon, 1996).

Personal mastery has been identified as the ability of individuals to innovate and learn by their own desires. Personal mastery oriented people are keen on stating the current reality, attaching it to their personal vision and transforming this vision to be closer to a real event (Senge, 1990; Senge et al., 1994). Personal mastery is classified as an antecedent of organisational learning as it allows individuals to learn and improve their visions. However, personal mastery orientation cannot stay at the same level; it should grow into a habit/norm that becomes imbedded in the organisation. Personal mastery oriented people are very concerned with their own personal development and maintain a high level of commitment and systematic thinking that promotes organisational learning (McGill et al., 1992; Senge, 1990; Senge et al., 1994).

From another point of view, the concept of environmental context is a very important dimension in organisational learning (Argote & Miron-Spektor, 2011). These authors indicated that environmental context includes many factors such as

organisational culture, structure, technology, financial system and relationship with other organisations such as alliances and joint ventures. The organisational context affects experienced encounters and transits them into knowledge into the organisation. Chiva-Gómez (2004) conducted a study in the ceramic sector to identify factors that facilitated organisational learning and found that the factors vary from sector to sector and depend on the business strategy and the context of the organisation. Moreover, the study found that the more learning the organisation was, the more innovative the organisation was. The study stated five factors that facilitated creating a context of organisational learning, which were experimentation, risk taking, interaction with the external environment, dialogue and participative decision making.

From another perspective, Mallak et al. (2003) referred to another dimension in the context of the organisation that is 'the built environment', which is a constructed environment designed from different requirements of the employees, customers and overall organisation. The built environment is affected by the culture of the organisation that resulted in changing individuals' behaviours accordingly.

Berson et al. (2006) established a multi-level model of organisational learning where the effective leader was the one who created the structure and the conditions for learning to occur at an individual level, then developed it into the networking level and finally integrated into a systematic/organisational level. At the first level, leaders might promote learning engagements with their members via motivation and develop their mental directions toward learning. Then, those members would be the drivers of learning within and between other members and social networks. After that, the leaders would facilitate the flow of learning between the social networks via



the structures and functioning of knowledge creation and transfer. At the final stage, leaders might act at the system/organisational level to spread the knowledge and apply changes at the institutionalisation level. Pearce (2004) stated that; the degree of a leader's influence on organisational learning depended on their authority and position, in a way that determine their extent of interference with individuals, between teams and also with social networks.

Yukl and Becker (2006) defined leadership as the process of influencing members and directing them toward shared objectives. This process includes teaching members about the approaches of accomplishing specific goals within the organisational context. Taking organisational learning into account, researchers have shown some common insights between organisational learning and leadership (Easterby-Smith & Lyles, 2011). A leader's behaviour influences learning approaches, innovation, individual aspects of learning and the flow of information into the different layers of an organisation. Relative to those domains, exploring new approaches of work and taking advantage of current knowledge (exploitation) have also been identified as two important roles of leadership at a strategic level (Tushman & O'Reilly, 2002).

Yukl and Lepsinger (2004) stated that; the most challenging task for a leader is how to establish the climate of collective learning. They can directly steer their followers toward collective learning by their words and actions and then they can indirectly modify them via workflows, policies and systems. Other researchers have agreed that it is very important for a leader to understand the obstacles associated with encouraging their members towards collective learning. The most common obstacle is the top-down approach for leading change and innovation. This approach

prevents collective learning as it is very difficult for the upper management to identify opportunities for change and learning from this direction. Conversely, if the approach is from bottom-up, then it would be more flexible and adaptable for any emergent situation (Yukl, 2009). Another issue is the restriction of knowledge and information that an individual is performing to protect their power and maintain a power of expertise (Atwater & Waldman, 2008). In this case, people will face difficulties in receiving accurate information in a timely manner and it will affect their decisions accordingly. Effective leaders can contribute by facilitating communication between the organisational social networks and might increase the access privileges to a wider range of their members to allow a greater and faster distribution of information. One more obstacle that affects collective learning is the conflict between the stakeholders of the organisation. In this case, the relative power of the stakeholder would determine the objectives and priorities of the organisation and determine the type of learning and knowledge to be implemented accordingly. Therefore, leaders can enhance collective learning by establishing shared values and objectives for learning and creating strong capabilities for knowledge exploration and exploitation (Yukl, 2009).

Most recent studies have focused on the relationship between leadership and organisational learning (Berson et al., 2006; Esterby-Smith & Lyles, 2011). They concentrated on the dual level of learning within an organisation; exploitation and exploration; and the 4I learning framework (intuition, interpretation, integration and institutionalization). At the same time; they examined the leadership and the organizational constructs effects on those mentioned learning approaches and the 4I learning framework. They found that; leadership can facilitate exploration among the individuals through motivating them to create new ideas. Also, leaders can enhance

integrating of new and established knowledge across individuals and organizational levels though creating a common direction. In addition; leaders can create the conditions between organizational teams and layers to embody new and existing knowledge in the organizational culture and this is their role in promoting institutionalization.

Moreover, at the same time organisational objectives might not reflect the collective goals of its individuals (Simon, 1991), but it can be reformulated and constructed into the learning activities of the whole organisation (Lave & Wenger, 1991). As a consequence, to state the relationship between leadership and organisational learning we need to examine the learning constructs associated between these two concepts, taking into consideration the contextual implications as well.

## **1.2 Motivation for the Research**

The first motivator that encouraged to undertake research about organisational learning is that learning has been identified as a key factor for innovation and organisational sustainability (Fard et al., 2009; Goh, 2002; Perez et al., 2005; Svetlik et al., 2007). With the fast and dynamic growing of all business fields globally, organisations need to maintain continuous learning among their employees. Understanding the role of leadership in organisational learning and sharing in transferring knowledge among employees are very important for the employees' development aligned with their organisational development (Swanson & Holton, 2001). One study of human resource development concentrated on ways to promote learning among employees (Marsick, V. J., & Watkins, K. E., 2003). This study also showed that organisations that focused on the development of their

employees' learning resulted in increasing productivity, job satisfaction and overall profitability of the organisation.

Related to my career, I have been working with the SEHA (Abu Dhabi Health Service Company) for the last eight years. I have seen a lot of transformational events that have taken place in my entity and in other SEHA entities, which has given me an insight that learning engagements among employees is very important. In addition, the environmental climate as well as the leadership role is major variables to cope with the revolution in health care development and highly competitive environment.

This study context is the health care context, which is recognised as a fast-changing environment that needs quick response and actions due to the purpose of serving patients (Mallak et al., 2003). There was an empirical study performed by Tucker and Edmondson (2007) that was conducted in the context of health care particularly in the intensive care unit to measure organisational learning. They considered that the knowledge of the medical field changes consistently and there is an essence requirement to identify a framework on how the medical context can be an environment of organisational learning. Throughout their study, the authors emphasised that the medical care context is attached to providing health care to patients of high quality parameters. Their hypotheses were based on three notions that were best practices transfer, team learning and process change. The study results showed that the transfer of best practices needs modifications in the new context. Moreover, the success of the organisational learning occurred mostly in the atmosphere of a psychological safety culture.

In contrast, Brown and Busman (2003) examined how expatriates can perform at the same level of practice as in their home country when they work abroad and how they can maintain their professionalism with work environment changes. It has been mentioned that cultural obstacles always exist and, in turn affect organisational learning, with the most obvious issues being individualism versus collectivism and harmonisation versus confrontation.

Despite the importance and sensitivity of the context perspective affecting organisational learning, there is a lack of the empirical studies of organisational learning in the health care context in the UAE. This is the second motivator that in this research that promoted the topic of organisational learning in the health care context.

From a context perspective, learning is being classified as a governmental strategy by our governmental leaders. Moreover, one of the key pillars in the Abu Dhabi Economic Vision 2030 is ‘Premium education and health care infrastructure’ (Abu Dhabi Economic Vision 2030, available from <http://www.government.ae>). In addition, recently the UAE announced its 2021 vision, visualising the “development of a knowledge-based economy”, which will be diverse, flexible and led by skilled professional Emiratis. The vision contains six important components with detailed objectives, related to education, health and economy, police and security, housing, as well as government infrastructure and services UAE 2021 vision, available from <http://www.vision2021.ae>).

### **1.3 Research Questions and Objectives**

In reference to the importance of this research topic (the influence of leadership on organisational learning) many studies have identified leadership as the engine behind organisational learning (Maslach & Leiter, 2001; De Cremer, 2006). However, previous studies have not indicated the specific leaders' behaviours and mechanisms underpinning leadership that affect organisational learning (Lähteenmäki et al., 2001). This means there are gaps in modelling how individual learning can be converted into organisational learning. Moreover, there is a need to recognise the type of conditions that are suitable for learning, due to the growing and changeable nature of today's business processes and environments. Researchers have not been able to clearly identify these conditions because of two basic reasons. The first one is that people do not learn under stress and insecure conditions. The second reason is that, due the rapid and huge changes in most of the dynamic organisations, it is very difficult to detect the factors of learning from many perspectives of changes (Lähteenmäki et al., 2001).

At the individual level, it has been stated that the empowerment of the employees is an important element in the context of organisational learning that is related to organisational culture and leadership (Mischel, 1973). From a process point of view, previous literature does not provide a deep image about learning processes; rather, it has shown how managers/leaders can adapt to the complexity of their work environment and provide alternatives to solve related issues (Salaman et al., 2005). In addition, it has not been shown how learning can be changed from different types such as from single learning to triple learning loop or from adoptive to generative learning. Thus, there has not been enough validation of the

organisational learning measurement models. Moreover, the knowledge in this field has not been cumulative (Lähteenmäki et al., 2001). Therefore, Lähteenmäki et al. (2001) provided some direction based on the literatures gaps on how to measure organisational learning. They recommended to focus on contingences and reject that there is one best model for organisational learning in every context. They also said to examine and detect the underling mechanisms between individual and organisational learning, as well as; examine learning related to organisational changes. Moreover, there is a need to consider that learning is a change in the mental structure of individuals where the context is important.

The present study specifically addresses the question “How do transformational/transactional leadership styles promote organisational learning in the context of health care?” Building on current theories of transformational and transactional leadership and on organisational learning conceptualisation, a theoretical model was developed and a set of propositions were aligned in a way to answer the research question and to describe the specific behaviours and practices that either facilitate or prevent organisational learning (Bass, 1985, 1998 ; Crossan et al., 1999 ).

The research aims were as follows:

1. Identify the influence of transformational and transactional leadership styles on organisational learning.
2. Identify the underlying mechanism between the two types of leadership and organisational learning.
3. Identify the role of trust, psychological safety and goal orientation in the relationship between leadership styles and organisational learning.

## **1.4 Contributions and Significance**

Organizational learning is a considerable prospective in today's working environment, where employees might repeatedly change their assigned responsibilities within the same organization or change their professions in other organizations. Therefore; it is not enough to focus on individuals learning without shed light on how to build an organization that offer all the capacity to support and pursuit learning in their culture. Over the last thirty-three years; organizational learning models has been established based on literatures and organizational own cases. However; those models needs to be redefined based on the organizational changes and their current status. In addition to that; organizations thought that; learning should take place from individuals then spread to the organizational level, in other words; learning is the responsibility of the individuals themselves as a primary condition. However; it is very important not to forget the impact of the relationship between the direct senior leaders and their followers to facilitate and improve learning (Marsick & Watkins, 2003).

At the individual level, learning is informal based on an early work done by (Marsick & Watkins, 1997). Their work explained how individuals create their learning culture. They mentioned that people learn when failures, challenges and mistakes take place that by default require a response or action. In those cases, individuals take different actions based on their understanding related to their mentalities and past experiences. After the individuals decide their action plan, then they will implement it. If the plan was below their expectations, then they will repeat the same cycle of analyzing the problem and initiate another action plan to solve it.



Individuals' selection of the action plan depends of their skills, experiences, authority and resources. Thus; their actions refined by their experiences and social context.

On the other hand; learning at the organizational level is not an accumulation of individual's learnings (Argyris & Schön, 1996). When individuals improved their learning capabilities, their collective learning can improve the overall organizational learning as long as the organizations establish appropriate mechanisms to support the usage of their individuals learning. Thus; individual learning is not equal to the organizational learning, but it is related to it.

Organizational learning level is similar somehow to individual learning as both of them includes gathering data, storage, interpretation and analysis and using of the information. However; there are differences in its fundamental nature as the individual learning depend on their cognition process from their heads and when individuals get the information, interpret them and reflect them in their practices; then it is transform into a context of organization through context, structure and culture. This is called organization learning mechanism (OLM) that takes place by individuals (learning in) into a context of organization (learning by). The cognition process by individual are the essence of organizational learning and there are other factors that affect the organizational learning such as cultural, psychological, policy, and contextual (Lipshitz et al., 2002). When the individual learning (learning in) is happening within the context of the organization and for the sake of the organization this is considered as organizational learning (learning by). This is also serving the same concept of OLM, when a single learning process performed and then upgraded into group and organizational formal level (Lipshitz & Popper, 2000).

Perretti and Negro (2006) explained how the structure is affecting the culture of learning at the organization level through affecting the common values, assumptions and beliefs. That was introduced by scholars like (Edmondson, 2002) when she showed how the horizontal structure with fewer power differences facilitate learning. Flat organizations encourage networking between employees and knowledge transfer across roles and levels (James, 2003).

Popper and Lipshitz (1998) has provided two facets that can build the organization learning which are the structural (hardware) are and cultural (software). The structural facet includes the system and standards of the organization of collecting, analyzing, storing and using if the information, while the cultural facet includes common beliefs and insights that facilitate the actual learning through the structural facets of the organization.

Lipshitz and Popper (2000) agreed with what Kim (1998) had mentioned that; organizational learning is more complex of individual learning as the organizational level you are dealing with a diverse and large collection of individuals. They presented a framework that discusses two concepts of organizational learning; one is the conceptual concept that is related to the mentality and cognition of individuals that think about the existence and reasons of the new changes or the changing conditions. The second one is the operational concept; that is related to the procedure level when individual learn how the task is performed and being captured as routines and standards. Zollo and Winters (2002) had a similar trend that they studied how organizations can initiate capabilities to learn and adapt its operational routines. The study found that; there are three mechanisms to maintain

such dynamic capabilities of operational learning; which are; tacit accumulation of past experience, knowledge articulation, and knowledge codification processes.

Based on the above mentioned scholar's findings; you can realize that the literatures vary on their focus as some of them concentrate on individuals (Yukl, 2006) and others on organizational learning nature and capacities (Lipshitz et al., 2002). Therefore; this research will contribute to the field through combining the individual process with organizational learning processes into one model. Also, due to the inconsistency in the past researches in terms of the affecting factors and intermediate influencers, this research will add value through exploring the underlying mechanisms between leadership and organizational learning. From a context perspective; the present research will investigate this model in a health care context, which in itself considered as one from the very few studies if not the only one that test a model of leadership and organizational learning in health care context.

Through intensive review of relative literatures, this research tried to connect variations in identifying the nature of organizational learning phenomena. This research is not critiquing any specific model or any theory of organizational learning; however; this research tries to fill some of the gaps that breaks the definition of organizational learning and combine the scatters of organizational learning model. Many researches focused on how individuals learn, however; very less studies concentrate on how organizations can learn. More empirical studies are needed to validate the measurements of organizational learning. This study introduces one set model developed to study how individual learning is translated into organizational learning of a single case of health care context.

### **1.5 Summary of the Chapter**

This chapter has identified the background of the present study, as well as its objectives and deliverables. It highlighted the consideration of health care context sensitivity that is aligned with UAE strategic vision. Solid theoretical basis was highlighted that being the base of this research contribution and expected practical and academic implications. The next chapter discusses the theoretical basis in details through previous literature related to the research topic. After that, the research methodology chapter indicates the research paradigm and theoretical framework. Then, the data analysis chapter expresses the methods used to test the research hypotheses. The last chapter discusses the results and provided possible practical and academic recommendations.

## **Chapter 2: Literature Review**

### **2.1 Introduction**

This chapter will review some of the significant conceptual literatures that discussed several debates about organisational learning identifications and functionalities. A review on organisational learning different identifications and variations will also be addressed. Then, a discussion of the leadership influence on organisational learning will take place. After that, there will be a review of the role of two types of leadership styles (transformational and transactional) on organisational learning. This is followed by discussing related mediators between organisational learning and the leadership styles based on the literature findings.

### **2.2 Organisational Learning Overview and Conceptualisation**

The revolution of exploring organisational learning has been occurring for decades owing to the tremendous changes and highly competitive environments in all fields of business. Levitt and March (1988) stated that learning is created from history and the organisation can transform their encounters by individuals into forms of work routines. Moreover, they discussed how an organisation can learn from the experiences of their individuals as well as adapt other organisations' experiences. Edmondson (2002) studied organisational learning from a team learning perspective. She explored details of how individuals interact in teams and how their personal traits affect their new knowledge and initiate new actions as a result.

Kofman and Senge (1993) explained that organisations must not isolate their individuals from each other and should not consider them as a tool, because when employees feel that they are only tools, their learning willingness drops and the

progress of the organisation will not be possible. They clarified that individuals need to feel their social and human identity as they are dealing with each other in that way. In addition, this is the best way for organisations to understand their employees' differences and their thinking systems. By this approach, the organisation will obtain the optimal degree of learning by individuals and interaction between them as well as transfer knowledge toward creating a learning pulse in their organisation.

Garvin et al. (2008) claimed that organisational learning is a place where its employees are consistently initiating new knowledge and transfer it between each other to assist their companies to move fast and adapt with the changing environments and their competitors. The authors here provided three criteria for managers and leaders to assess whether their organisations are learning ones or not and whether they are taking advantages of the knowledge being created or not, which are 1) a supportive environment, 2) concrete learning processes and 3) leadership that reinforces learning. Moreover, the authors provided a measurement tool that is an organisational learning survey to evaluate how well their individuals and teams are performing with each concept.

From another perspective, Crossan et al. (1999) stated that most of the studies conflicted with each other, with some focused at the individual level, i.e., learning is cognitive (know what), whereas others focused on group level, i.e., learning is behavioural (know how). The same study attempted to identify the link between the different concepts introduced in all related literature and build on their gaps. The authors stated that there was a clear connection missing between the context of the organisation with a learning atmosphere amongst their individuals and groups.

However, they did not show the organisational role in cascading learning and knowledge into its multi-levels through their structures, roles, codes and policies.

Inkpen and Crossan (1995) presented a framework stating that organisational learning is conducted by important elements (i.e., individuals) who are the main players of the learning process. Moreover, individual learning consists of both cognitive learning and behavioural learning that cannot be separated. Individuals' cognitive learning is conducted when individuals identify gaps or error in their beliefs or experience and start to modify their gaps by changing their behaviours and actions.

In contrast, Handley et al. (2006) defined organisational learning from a different angle, which is that contextual and social practices influences learning ('situated learning'), where individual learning becomes refined within communities and related practices and participation in a wide definition. From another view, Brown and Duguid (1991) described organisational learning as "communities of practice" that referred to the collective practices of its individuals within the community of the same organisation taking into account that learning was also affected by individual communities outside the organisation.

Cohen and Bacdayan (1994) discussed that organisational learning can be created from the accumulative work experience and knowledge being practiced via significant actions in the organisation such as routines and documented as policies and codes of structure that by default act as a reference and memory of storage for the organisation. Crossan et al. (1999) developed a framework of organisational learning that involved four functionalities, which were intuiting, interpreting, integrating and institutionalisation and connecting these processes within multi-

levels of the organisation, i.e., individual, group and organisational levels. They explained the organisational learning via these four processes within three levels of the organisation, where the four processes are taking place in a logical manner and via the different levels in an organised method. For example, intuition is an individual character that might occur within a group and organisational context; however, the initial process happens from the individual. Similarly, groups are able to interpret their insights and share their views and intuitions throughout their experiences in an interactive system. When a repeated action within and between groups becomes a routine and formal codes, then we can say the institutionalising process has been embedded at the organisational level.

Crossan et al. (1999) did not show what type of encouragement or atmosphere was required to transfer knowledge between different levels in the organisation; however, Edmondson (1999a, 1999b) presented a framework of teamwork learning through creating a psychological safety feature within the team. Group learning has been defined by Edmondson (1999a, 1999b) as an active and continuous activity of actions and reflections through questioning methodology; looking for feedback and group members views; reflecting on experimenting outcomes, discussions or mistakes; or contingency results of actions. Avery et al. (2007) explained in their study that psychological safety is the ability of an individual to stand up and discuss their opinion in an open manner within a team without any fear. In such a way, team members can be more reflective on other's experiences and views and then can change behaviour or routines within the organisation. Recent research by Kostopoulos et al. (2013) supported the notion of team learning having emerged as a multi-level process from individual intuition to integration within team members.



New perspective has been included in the organisational learning definition that is social construction, which indicates that learning cannot be isolated from applying places and social networking. Therefore, learning is a combination of cognitive recognition and behavioural practices directed by contextual elements (Handley et al., 2006). The competitive environment enforces organisations to establish strategies aligned with continuous development and learning to survive. Chadwick and Raver (2015) argued that organisational learning and an organisation's goals cannot be separated and should be linked together. The individual encounters in the workplace that turn into collective situations affect the motivational component of organisational learning.

In the present study; organizational learning conceptualization has been adopted from a study by Jerez-Gomez and Valle-Cabrera (2005) and their research instrument has been used in this study. In their research, organizational learning defined as the ability of processing knowledge by the organization. Process knowledge described as creates, acquire, transfer and integrate knowledge. This process will be translated in the behaviour which reflects the new or modified cognitive situation in order to improve its performance. Their research instrument indicates that organizational learning contains four elements; managerial commitment, system perspective, openness and experimentation and knowledge transfer and integration.

### **2.3 Leadership Influence on Organisational Learning**

Studies on the history of the subject of leadership influence on organisation learning focused on the personal features that were associated with a successful leader (Argyris, 1955; Mahoney et al., 1960). The theories of these previous studies

assumed that leaders were born with natural traits that differentiate them from non-leaders (Stogdill, 1963). New approach has been initiated to identify the style of leadership via behavioural and style theories that have been adopted by successful leaders (Hemphill & Coons, 1957; Likert, 1961). However, the behavioural and style theories have been criticised as they do not consider the situational effect of the leader's behaviours (Mullins, 1999). This gap was the driver for the creation of situational and contingency theories of leadership (Fiedler, 1996; House, 1971; Vroom & Yetton, 1974). These concepts shifted the leadership identification from the 'best one to lead' to 'context leadership'. Moreover, it concentrated on the style adopted by the leader to manage the situation and to direct the followers based on contingency and context factors.

There are many leadership styles that been introduced in the literature such as autocratic leadership. This type of leader over controls their followers, underestimates their opinions, does not show respect for their values and limits their followers' participation in decision making (De Cremer, 2006). Their leading technique decreases their followers' satisfaction and job engagement. They force their followers to accept their decisions rather than motivate them to express their own ideas. Such leadership decreases employees' tendencies to participate in achieving the desired objectives and increases restrictions above the employees that is connected to lack of voice (Maslach et al., 2001). They are also unsupportive and do not consider their employees' needs (Judge et al., 2004). In contrast, participative leadership encourages employees to speak up and become involved in the decision making that improves organisational performance. This type of leadership enhances employees' self-determination and self-valuing, and supports the sense of ownership, which increases their motivation and efficiency (Arnold et al., 2000). It stimulates

the feelings of empowerment among the employees. Many empirical studies have shown that participative leadership increases performance of the employees by substantial motivation and empowerment that is translated into four dimensions: meaning, impact, competences and self-determination (Ahearne et al., 2005; Leach et al., 2003). Laissez-faire leadership style is another type of leadership that has been identified, which avoids decisions being made by the leader and the leader lets the employees make all the decisions (Luthans, 2005). This type of leader delays responses, is unavailable when needed and avoids making decisions. Skogstad et al. (2007) stated that this type of leadership involves destructive behaviour aligned with a highly stressful work environment and psychological pressure. They agreed that laissez-faire leadership causes conflicts between employees, provides unclear roles and also role conflicts. Kelloway et al. (2005) described laissez-faire leadership as poor leadership that appears in the absence of a leader and avoids intervention or both. Decisions are not made in a timely fashion and feedback is not provided or is delayed. Laissez-faire leadership was described by Lewin et al. (1939) as a leader obtaining the leadership position, but the responsibilities were more or less abdicated from this leader. This type of leadership is also classified as zero leadership that affects the valid accomplishment of the organisational objectives (Hoel & Salin, 2003).

Recent studies focused on constructive leadership styles that are related to organisational effectiveness, which are typically parallel with today's dynamic and challenging business environments (Noruzy et al., 2013; Hamstra et al., 2014). Organisations need to re-design their organisational climates to create an organisational learning to suit the rapid changes in their business fields and requirements. Many studies have identified leadership as one of the essential factor

that affect employees' behaviour, innovation and performance as an outcome (Amabile, 1998; Jung, 2001; Mumford & Gustafson, 1988). Other studies have also supported these findings and suggested that leadership can establish an environment that encourages employees to try different and new ways of performing their assignments without fear of being punished even if the results are negative (Amabile et al., 1996).

Conceptually, studies have shown that leadership has a strong influence on transforming the working environment and shaping the context at the interaction pathway of their individuals to state their objectives, identify gaps and provide resolutions (Amabile, 1998; Redmond et al., 1993). This was also stated more widely by Schein (1992) who mentioned that leaders have a big role in changing their organisational culture. This study was the baseline for other scholars to build upon and indicated that when leaders change their organisational culture and climate to support creativity of their individuals this encourages organisational learning and sustainability for the long term (Yukl, 2001). In addition, when the organisational context supports the reward system toward their employees' performance this leads to exploring new skills and redesigning the existing work approaches, which are all leads to the promotion of learning and creativity within the organisation (Jung, 2001; Mumford & Gustafson, 1988).

Speechley (2005) stated that effective leadership should contain learning enhancement requirements and improvements of the leader's personality. Similarly, Amagoh (2009) said that effective leadership should be carried out by the directors of the organisations to survive in the changing business environments along with the

risk of uncertainty. Moreover, leadership efficiency is the baseline for organisational growth and continuous improvements.

It has been stated by Singh et al. (2010) that that visionary leadership has a strong impact on the learning competencies of organisations and is one of the most effective pillars to enable maintenance of organisational learning. Therefore, leadership has an effective role in the establishment of organisational learning.

Many authors have taken to classifying the leadership styles in the organisational learning into different types: developers (Boydell & Leary, 1994), coaches (Ellinger et al., 1999 ; McGill & Slocum, 1998), facilitators (Macneil, 2001; Weaver & Farrel, 1997) and teachers (Cohen & Tichy, 1998). This was discussed in depth by Senge (1990) who stated that the leader's role in enhancing organisational learning is to teach individuals about the organisation's mission, vision, values, strategies, policies and procedures. In addition to that, it is very essential to integrate a common mission and visions to create some collective objectives, assisting individuals to develop their thinking approaches, establish effective learning processes and help individuals to improve their mental system and continuity of learning process. Empowering individuals and delegating responsibilities are also important elements of being an effective leader in organisational learning (Hitt, 1995). That was supported by Macneil (2001) when he mentioned that the major role of the leader was to facilitate sharing of knowledge via teamwork approaches and considering failure and mistakes as opportunities for continuous learning in the organisation. To prove this finding, Boyle (2002) stated that to have a survival organisational learning, leaders needed to create relationships with their subordinates, enhance learning commitments and reduce centralisation in management.

Leaders are the main drivers of creating organisational culture and structure; thus, their role in organisational learning is very effective (Popper & Lipshitz, 2000). They also have a strong impact on improving the process of learning and outcomes of the procedures and activities in organisational learning (Lam, 2002; Leithwood & Menzies, 1998). To have an effective organisational learning, open culture and psychological safety are two important components that need to be emphasised by leaders (Argyris & Schon, 1996; Edmondson et al., 2001; Schein, 1992).

There are four leader behaviours that increase members' engagement in learning activities. First, creating an emotional and social relation between the leader and the member will lead to a high quality relationship and increase the learning engagement (Graen & Uhl-Bien, 1995). Second, setting difficult goals by the leader that include implicit and explicit goals, which will lead to better performance of individual and better learning engagement. Third, provide more opportunities for learning by leaders by providing more time and resources. Fourth, provide feedback from leaders to members for improvements and learning purposes (Locke & Latham, 1990, 2002).

Previous studies have shown a relationship between leadership and organisational learning (McGill et al., 1992; Senge, 1990; Senge et al., 1994; Tushman & Nadler, 1986). In organisational learning, leaders need to create continuous learning mechanisms, inspire followers, provide directions, teach followers, and shape mentalities that look at the future and highlights roles and responsibilities (Sarros et al, 2002). However, the influence of leaders on a process is still not clear and is limited (Bass, 1999; Conger, 1999).

Recent studies have focused on the constructional leadership styles that are related to the organisational efficiency, which are basically two types: transactional and transformational leadership and the current study has adopted those two types of leadership due to its context relevancy and due to the recent investigations by the scholars (Noruzy et al., 2013; Hamstra, 2014). Transactional leadership identified as an exchangeable relationship with the followers (Bass & Avolio, 1993). Transformational leadership is a motivational approach that is built on passion toward a shared vision (Bycio et al., 1995; Howell & Avolio, 1993).

#### **2.4 Transformational Leadership and Organisational Learning**

Burns (1978) defined the transformational leader as the one who motivated their employees via values and ideals. Transformational leaders should have credibility to be accepted by the employees, so that they will follow his/her pathway. It has been stated that transformational leaders can perform a huge transformational event at both the individual and organisational level, if they succeed in inspiring their followers, which in turn will exceed expectations (Bass, 1985; Keegan & Hartog, 2004). Thereafter, Bass and Goodheim (1987) stated that; the transformational leadership style was composed of three factors: charisma, intellectual stimulation and individualised consideration. Charisma has been measured when the followers trust their leader, believe his/her values, adopt them and then act toward exceeding the mission. Individual consideration means that the transformational leader is concerned about every individual needs and differences. Dealing with employee's case by case or one by one, by addressing their needs, their goals and their challenges. With intellectual stimulation, transformational leaders inspire their employees to think outside the box, try new ways of solving issues and try to optimise the maximum

level of their employees' performance regardless of their past performance and their years of work (Bass, 1985). Parasuraman and Berry (1988) stated that these characteristics would eventually enhance the overall quality standards of the organisation.

Transformational leaders motivate their followers to have common values, and inspire them to achieve the objectives of the organisation (Zagoršek et al., 2009). Transformational leaders have the ability to facilitate, mentor, train and encourage learning among members. Organisational learning can be developed when their leaders/managers not only can produce learning, but also when they can promote a sense of commitment to learning and sharing it within their layers (Ulrich et al., 1993 ; Seaver, 2010).

Trust relationships have also been indicated as another main element of the transformational leadership style, whereby individuals will work collectively toward shared values and objectives (Embry, 2010). Transformational leaders can exploit the potential capabilities of the individuals via an influential approach and then implement their knowledge in a practical way, which leads to transforming their organisations and improving their existence and performance as well (Aragón-Correa et al., 2007). It has been proposed by Noruzy et al. (2013) that there is a positive relationship between transformational leadership and knowledge management via exploitation of existing knowledge and exploration of new knowledge. Transformational leaders can create a highly interactive social context that enhances individual's communication, shares activities, and discovers new work approaches and knowledge (Bryant, 2003). It creates a sense of shared pathways and directions (Bass, 1999). In addition, it encourages individuals to take risks, be innovative and



increases employee commitment (Bass, 1999; Bass & Avolio, 2000; García Morales et al., 2008). Dvir et al. (2002) stated that transformational leaders maintain specific traits that support their employees to overcome their fear of challenges, which leads to creativity and learnings also. In their study, they performed longitudinal field experiments on the transformational leadership causal influence on employee's development and performance. Their study results indicated that there was a positive impact of transformational leaders on their direct followers and on their indirect followers, which confirmed the causal relationship proposed by early studies. Transformational leadership improves motivation, morality and empowerment among employees. This type of leader creates strong social commitments with their direct and indirect followers that improve their performance automatically.

Bass et al. (2003) undertook a study to measure how transformational leaders can predict a unit performance under stressful and unstable conditions. They commenced their study to clarify the increasing attention toward understanding why transformational leaders are more qualified to activate their follower's motivation and performance at a high level. They transformed their follower's self-thoughts and significance. They connected the followers with the leaders and organisational goals by building social networking and identities. Under those conditions, followers feel a sense of power, commitment and unity that by default increases their performance. This supports engagement in difficult and challenging missions by creating a collective team confidence. After that, Bass et al. (2003) explained why they chose the transformational leadership style in a military context. They mentioned that transformational leadership is comprised of adaptive leadership. Adaptive leadership demonstrated a high level of moral and ethical representation. They were asked to obtain their followers trust, so they could offer a high level of commitment. It is

essential for them to adopt continuous development of their leadership competences and their followers' development as a requirement of the U.S military to highlight the obstacles in context. In the military context, there are crucial elements under their unit's performance, which are unity, adherence, leadership and ethics (Bass, 1998; Gal, 1985). Bass et al. (2003) study results indicated that transformational leaders can predict the performance of the unit that is working under uncertain conditions. Their findings were relevant to the prior studies, which might be due to the complex nature of the assigned missions. This requires the leader to perform effective coordination with followers, and to clarify the roles and expectations of the followers for the performance and deliverables with the attached recognitions. Platoon leaders might work toward establishing a collective work environment, where everyone knows their assignments, timeline and team members to enhance their performance. Through this basis, the leaders and their followers will be ready to face any sudden contingencies and respond in a creative way. Transformational leaders can predict the unit's performance by inspiring a high level of motivation and knowing their members' strengths and weaknesses.

It has been proposed by Guzzo et al. (1993) that transformational leadership is an antecedent of a group potency. Group potency consists of the design of the group, the leadership and the operational context. When group members are working on an interdependent mission under a leadership type that supports team working, then the team members work on a collective confidence/potency to accomplish the desired outcomes. It has been argued that when the leader induces their followers to a collective performance, group efficiency will be improved. Thus, transformational leaders empower their followers to trust themselves and accept their missions (Bass & Berson, 2003). Sosik et al. (1997) stated that group potency mediates the impact of

transformational leaders on the group creative performance. Dvir et al. (2002) deployed a real field experiment with platoon commanders to test the impact of transformational leaders and they found that they positively enhanced their float performance for the following six months via motivation, empowering and potency. Transformational leaders enhance employees' performances by identifying the confronting challenges (Avolio, 1999 & Bass, 1998).

It has been agreed by Vera and Crossan (2004) that a transformational leadership style can promote organisational learning but on specific conditions either in exploration (feed-forward learning) or exploitation (feedback learning). They proposed that a transformational leader promotes changes of existing routines and proposes new ways of working.

As per Tichy and Ulrich (1984) transformational leadership initiates organisational change via the feed-forward flow that begins with individual's intuition, interpretation and then integrates into an organisational level via systems and procedures. They also encourage an open and easily accessible culture among individuals and across boundaries and departments (Goleman et al., 2001). By being accessible, the learning will flow easily between individuals and organisational layers (Waldman & Yammarino, 1999). Similarly, Tichy and Devanna (1986) stated that transformational leadership style facilitates learning via teamwork and taskforce initiatives. Vera and Crossan (2004) mentioned that transformational leaders encourage current system changes.

The other learning flow discussed in Vera and Crossan (2003) is feedback learning flow. Crossan et al. (1999) mentioned that feedback flow is about ensuring that routine work procedures are deployed as formally stated. It is about creating a

culture of discussions of the experiences and interpretation of encounters, which will lead to change on both individual's cognitions and behaviours as a consequence. Feedback flow is vital and important to ensure consistency of applying work routines as well as updating all parties about any change to keep them all on the same page. That is why Vera and Crossan (2004) study proposed that transformational leadership facilitated feedback learning. Based on the aforementioned arguments, the below hypothesis is proposed for the present study:

- ❖ H1: Transformational leadership is positively related to organisational learning.

## **2.5 Transformational Leadership and Trust in the Leader**

This section will review how transformational leader and trust in the leader translate into organisational learning. Trust is the connecting bind in the relationship between the leaders and their followers (Nanus, 1989). When the relation is built on trust, there will be positive consequences on the individual's behaviours, performance and overall satisfaction (Jung & Avolio, 2000; Pillai et al., 1999). In contrast, if the trust does not exist within the relationship, the exchange of knowledge and information will be blocked between the followers and their leader (Harari & Brewer, 2004).

Trust is considered a human concept whereby organisations consist of social and human relations and trust plays a vital role in the dynamic of those relations (Hollnthoner, 2010). Rousseau et al. (1998) defined trust as the "trust is a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behaviour of another." Based on this, trust can be defined as the expectations about the other party and acceptance to engage in

risky situations and to be vulnerable (Hollnthoner, 2010). There are many positive results of the trusted inter-related relations between individuals of the organisations. Trust enables effective networking and fast creation of work groups which in turn facilitates organisational learning as a consequence (Miles & Snow, 1992; Meyerson et al., 1996 ; Dirks & Ferrin, 2001).

Blomqvist and Stahle (2000) provided a conceptual model that shows how to build inter-organisational trust by establishing the basis of interaction between individuals and the organisation. The study explained that creating proper conditions to create trust is essential, and presented a model that showed that organisational trust can be translated into interdependent individuals and organisational actions. From an organisational perspective, the basis for trust can be created via organisational visibility in terms of clarity of roles, strategic objectives, sustainability and proactive learning adaptation. Clarity of organisational needs is also considered a basis of building trust from an organisational view. Moreover, organisational culture, open communications, organisational strategy and competencies are also additional features to build trust. From individuals perspective, trust can be translated in exchange with the organisational if the individual is willing to communicate, is proactive to learn, is flexible and tolerant of conflicts. In addition, the ability to take risks, communicate with different individuals and groups; maintain commitment in achieving goals and being professional.

In the same research area, Bijlsma-Frankema et al. (2006) proposed a different approach to organisational learning by highlighting the concept of frictions and aligning frictions to conditions that permits learning activities and the ones preventing the learning process also. In this study, a cardiology department was one

of the three cases studied as one of the largest departments and most complex areas of the hospital of the study (study context). The need to maintain high quality standards was a priority and this was communicated between all team members. Owing to the urgency and difficulty of patients' cases, there was a dynamic and mutual interaction between professionals. The complexity of the nature of the work could be a source of conflict; however, there was a climate of trust between all parties toward providing a high quality of medical services based on the hospital's standards. Having principles encouraged a shared interest versus individual interest that in turn eliminated all conflicts and allowed individuals to work based on a common vision in an environment of trusted standards. Moreover, the study showed that due to complications of the patients' cases, professionals had to meet almost every day to discuss cases and plan purposes, which allowed for valuable learning opportunities and performance development. Autonomy and independence were also individual characteristics that were mentioned in the same study that supported the learning activities in the organisation as an individual behaviour that pushed individuals to gain learning.

Conversely, this type of self-referencing might prevent knowledge transfer between team members as well as between departments, which might be due to the architecture of the hospital that blocked learning between departments. The study results discussed that literal relations consisting of trust between individuals was considered an enabler for organisational learning; however, in this study, learning opportunities were lost in several situations due to the urgency of cases that meant that regular meetings were cancelled to respond immediately to patients' needs.

This study was geared toward obtaining a clear understanding of the enablers and factors of organisational learning of Nonaka and Takeuchi (1995). As an update of their study, Nonaka et al. (2000) mentioned that trust was a moderating factor in the interaction between individuals that enhanced the creation of knowledge and transferal of it. From the point of knowledge transfer, the higher level of trust, the higher knowledge exchange activities in more accurate approaches (Szulanski et al., 2004). Trust in general affects the knowledge transfer process as it correlates many parties and also cuts the cost of knowledge transfer (Levin et al., 2004).

Trust has been considered as an intuitive driver of a successful leadership. Individuals who believe that their leaders care about their personal interest are more likely to support those leaders and follow their directions (Bass, 1985; Brower et al., 2000; Burke et al., 2007, Chen et al., 2014). Bezuijen et al. (2009) provided an investigation that described the type of leader's behaviour that affected the engagement of individuals in the learning activities. They supported what Maurer et al. (2003) mentioned that managing learning and supporting employees sharing in the work development and learning were two of the most important responsibilities of leaders. Bezuijen et al. (2009) introduced the theory of leader-member exchange relation, which consists of trust, respect, transparency and accountability and mediates the relationship between leader expectations and employee engagement in learning activities. Bezuijen et al. (2009) agreed that goal specificity, goal difficulty and providing learning opportunities strengthen the leader relationship with employees and, in turn, increase employees learning involvement.

Hannah and Lester (2009) argued that leader's draw the method of analysis and react toward situations for their group members as well as create the beliefs

among their group members. Many scholars argued that when employees have a perception of trust and support toward their leaders, they tend to engage in high-risk assignments and challenge ambiguous outcomes (Tierney et al., 1999). Group members tend to draw their goal orientation based on their personal choices; however, the leader has a strong influence on transforming the type of group member's goal orientation if they trust their leader (Gu et al., 2015).

Previous studies have shown the vital role of trust in the supervisor to decrease work failures, increase quality of work and enhance the overall organisational sustainability and effectiveness (e.g., Dirks & Ferrin, 2002; Kramer, 1999). These findings were supported by other authors ; when they found that trust has practical implications for the employees in terms of work commitments and job performance (Argyris, 1964 ; Davis et al., 2000 ; McAllister, 1995).

Previous studies have also shown that the commitment of followers and their work engagement increases when they trust their leader and their values match his/her values (Meglino et al., 1989). Trust in the transformational leader is one of the most effective variables that the leader should build in the relationship with his/her followers. Transformational leaders can influence followers when they believe their words and trust their vision (Podsakoff et al., 1990; Yukl, 1998).

The need for trust within the relationship with transformational leaders exists from the nature of this leadership style; as such, it involves uncertainty, worry, confusion, taking risk and high levels of fear. Therefore, trust is essential for this type of leaders to sustain and prevent such issues (Kotter, 1996). The empowerment and motivation by transformational leaders to their followers creates such trust and encourages them to take ownership (Avolio & Bass, 1995). In this way,



transformational leaders gain more respect and are more trusted by their followers as well as they will be imitated by their followers as a role model (Bass & Avolio, 1990). Based on the above-mentioned arguments, the below hypothesis is proposed:

- ❖ H2: The effects of transformational leadership on organisational learning will be mediated by trust in the leader.

## **2.6 Trust in the leader and Psychological Safety**

Psychological safety means that the employee can express his/her views without fear from any negative outcomes on their employee status or career (Kahn, 1990). The creation of a culture of psychological safety can be a motivator of learning behaviour of the employees that, in turn, creates a culture of organisational learning (Edmondson, 1999b). Psychological safety relates to the individual's insight about how others will react when he/she reports mistakes, asks questions, asks for clarifications and explanations or raises new ideas. It is the expected reactions from those behaviours, i.e., that someone will be hurt or upset (Edmondson, 2004).

Psychological safety is different to trust; however, both involve perceptions of making choices to minimise the negative outcomes in relations. When you trust someone else that means the focus of the object is on others, while, psychological safety is about the self and whether others will give you the credit when you make an error (Edmondson, 2004).

Li and Tan (2013) stated that when the relationship between the leader and his/her subordinates was built with trust; this relationship would be translated into a positive result in the employee's relation. However, they stated that this type of relationship should have underpinning mechanisms such as a culture of

psychological safety. Similarly, it has been stated that a culture of psychological safety is positively associated with task challenges within teams, which in turns has implications in the workplace and job performance (Bradley et al., 2012).

Walumbwa et al. (2011) conducted a study that examined the relationship between trust and psychological safety and their effect on the performance via authentic leadership style and the results support their assumptions positively. Authentic leadership pursuits a climate of transparency and ethical relation between the leader and the followers and this relation boost employee's development (Walumbwa et al., 2008). It has been stated by many studies that the type of leadership that encourage employees sharing in the decision making and sharing knowledge and information are more likely to enhance trust with their followers (Dirks & Ferrin, 2001). Many empirical studies have found that transparency and the level of psychological safety provided by the leader affected the followers trust in the leader (Avolio & Gardner, 2005). When the leaders deal with their followers with a climate of openness, comfort and truthfulness; then a climate of safety will be generated accordingly (Ilies et al., 2005). This type of integrity between the leader and followers in the operational processes (including decision making) will turn into a trust relation. Because of this trust, a sustained transparency would take place when dealing with challenges. Researchers have found that when there is a shared value in the relationship between the leader and the followers, trust will result (Podsakoff et al., 1990). The joint integrity of transparency and trust between the leader and the followers would evolve into a psychological trust. When followers trust their leaders, they will be more comfort to share more sensitive information. Thus, when followers are willing to share information without fear, trust would be enhanced (Avolio & Gardner, 2005).

Mayfield et al. (2016) studied the mediated effect of trust and psychological safety on team effectiveness. Their results indicated that trust and psychological safety emerged into attitudes, concepts and emotions of the individuals that enhanced team satisfaction and identification. This emergence is the output of team processes and interaction (Marks et al., 2001). Trust and psychological safety emergence affect team functioning by enhancing the climate of psychological safety among team members (DeChurch & Mesmer-Magnus, 2010). Trust at the team level reflects the degree of quality in the relationship between the team members derived from the shared climate and interdependent tasks (West, 2001). It is evidenced that team trust is generated from the collective team work that affects team satisfaction, identification and commitment (Costa & Anderson, 2011).

Dirks and Ferrin (2001) stated that trust can be considered a contextual factor that creates the conditions of cooperation, higher performance and positive perceptions. Conversely, psychological safety is also a moderator that can generate a condition of trust among team members to share information and express their opinions without fear of negative reactions (Edmondson & Lei, 2014). Psychology safety is also a contextual variable that can be derived from the social interaction and sharing information with a trust relationship in which it produces high performance (Bradley et al., 2012). It also improves the utilisation of team conflicts in a positive way to enhance team performance. Psychology safety climate induces collaboration between team members and supports team expertise diversity (Caruso & Wooley, 2008). In a trust and psychological safety context, team members are more likely to share in risky assignments in a positive way that lead to improvement in learning and performance.

Edmondson et al. (2004) presented a study on the factors that promote psychological safety in teams and their related outcomes and the effect of psychological safety in emphasising learning behaviours. One purpose of this study was to differentiate two constructs: trust and psychological safety. Both of them depend on the other party reaction toward taking risks and being vulnerable to other's actions. However, psychological safety can be described as how the other person will respond when an individual asks a question, provides feedback, requests a report, reports failures or suggests new ideas. The individual in such a case is entering into a small decision-making process, i.e., whether to act or not, depending on the individual's beliefs about the expected response from the other person. For instance, will it make the other person embarrassed, will it affect my image, will it affect my manager, and so on. In contrast, trust has been defined as the exchange of confidence between parties to an extent that no party will be harmed or fall into risk by the actions of any of the other parties. This type of confidence will allow overcoming the associated risk and obtaining the optimal results from this interaction (Jones & George, 1998). To differentiate psychological safety from trust, Edmondson (1999a) mentioned that teams tend to have a common interpersonal safety climate at the same group, but trust can be associated in both the group and individual levels. Based on the above-mentioned arguments; the below hypothesis is proposed:

- ❖ H3: Trust in the leader is positively associated with psychological safety.

## **2.7 Psychological Safety and Organisational Learning**

Psychological safety plays a vital role in promoting organisational learning (Edmondson, 1999a, 2004). It involves critical thinking and a healthy environment

that does not accept traditions, but accepts changes and also has open minded methods of professionalism (Dewey, 1986). Maintaining a common belief that members are safe when they are discussing, reporting errors, providing feedback and speaking up is very essential to facilitating organisational learning (Edmondson, 1999b). Speaking up about mistakes and sharing experiences and knowledge enhances organisational learning and performance (Leonard-Barton, 1995; Sitkin, 1992; Tucker & Edmondson, 2003). When the employees believe that they are safe from ruining their self-image or destroying their career or embarrassing themselves, then a culture of psychological safety exists and the organisational learning will be more effective (Edmondson et al., 2004).

Edmondson (2003) argued that psychological safety is an indicator of having organisational learning as it reduces errors and improves procedures and systems. She suggested that when the employees are taking mistakes as opportunities for gaining knowledge, then the engagement rate would be higher and the learning activities would increase accordingly.

Edmondson et al. (2004) argued that psychological safety consequences arising from team activities encouraged learning activities across organisations that leads to create an ongoing organisational learning entity. Past studies on organisational learning paid less attention to the team behaviours that led to promote organisational learning (Edmondson, 2002; Kasl et al., 1993). Most of the literature focused on the individual's worries about their interpersonal behaviour (Edmondson, 2002). Edmondson et al. (2004) supported previous literature (Edmondson, 1999a, 1999b) that psychological safety can improve behaviours related to learning and overall organisational development.

Edmondson et al. (2004) discussed five behaviours as positive outcomes of team psychological safety and in turn promote learning behaviours in the organisation. The first is asking for help when every team member seeks assistance and requests information when they face any obstacles or problems. As per Anderson & Williams (1996) this type of co-operative behaviour leads to create more chances for learning activities. Second, feedback seeking that promotes learning behaviours between the same group and different groups (Ancona & Caldwell, 1992). Third, speaking up about mistakes and concerns psychological safety allows the opportunity to discuss mistakes and concerns that allows for learning opportunities. Fourth, team psychological safety encourages innovated behaviour between team members and between teams across the organisation. Fifth, psychological safety promotes engaging in boundary spanning behaviours, which is concerned with teams' communications about specific tasks, assignments, coordination and requesting resources (Ancona, 1990; Ancona & Caldwell, 1992).

Edmondson et al. (2004) provided valuable implications for promoting a psychological safety to create organisational learning. They stated that; interpersonal fear exists in all organisations regardless of strengthens and context. This fear differs between teams; therefore, maintaining a climate of psychological safety between team members and co-workers will reduce the fear and emphasises learning in the organisation. Moreover, when teams work face-to-face this will be more comfortable and enhances learning activities.

Higgins et al. (2012) conducted a study to examine the effect of psychological safety on education in the U.S. Their sample was drawn from 941 teachers across 60 schools that measured the influence of learning providers/teachers

toward psychological safety on learning and organisational learning as a consequence. Their study results reflected that a high level of psychological safety climate was reinforced at a high level of organisational learning via free discussions, asking questions and regular feedback. They based their argument regarding psychological safety on the cognitive scientific approach that described how the social and cultural change of the organisation shaped the way of learning among employees (Honig, 2008). Specifically, school settings are changing repeatedly in which internal conflicts and negotiation increases. Therefore, it is important to study teachers' behaviours that affect organisational learning (Gallucci, 2008; Hubbard et al., 2006).

One of the 'building blocks' of learning that was suggested by Garvin et al. (2008) and is considered one of the basic elements of organisational learning adaptability is the building of a supportive learning environment. Such environments accept employee's different views, provide blame free environments, open environments to accept new ideas and provide enough time to discuss and provide feedback on ideas and obstacles. In addition, Garvin et al. (2008) identified the working climate as a key driver to foster a learning environment. They suggested psychological safety as a key factor in the learning environment, where teachers can speak up and propose enquires where applicable in a comfort way that in turns boost team learning. Moreover, it builds professional learning communities at schools via open negotiations and discussions between teachers.

Similarly, Silins et al. (2002) studied the social factors that affect students learning in Australian schools and found that having a trusted and psychological atmosphere increases students' learning participation and activities. Building upon

this result, Goh et al. (2006) investigated the extent of using past mistakes and failures in strategic planning processes at schools as a consequence of the faced obstacles during school improvement events. They found that schools were hiding past failures and sharing positive information only; in which it created unsupportive culture to improve previous practices. To have such transparent negotiations between teachers to discuss what has been done correctly and what should not be done requires a strong and high level of safety climate in the organisation (Bryk & Schneider, 2003). In light of the above, the following hypothesis is formulated:

- ❖ H4: Psychological safety is positively related to organisational learning.

## **2.8 Transformational Leadership and Psychological Safety**

In terms of transformational leadership and psychology safety, Pillai et al. (1999) stated that leaders who are considered as role models for their employees, inspiring them toward achieving a collective vision, are creating a climate of psychological safety with trust in their leaders. Such leaders encourage their employees to think in creative approaches to overcome the obstacles in their missions using intellectual stimulation. In addition, leaders are motivating their followers to take a high level of risk in their workplace with guaranteed safety including the physical safety of individuals (e.g. occupational safety), which is the individual consideration.

Similarly, Avolio et al. (2004) stated that psychological safety climate mediates the relationship between transformational leadership and employees' commitment. This study aimed to fill the gap in the literature regarding the inner processes within transformational leadership (Bass, 1999). With transformational leadership, leaders



provide greater empowerment for their followers that are aligned with a psychological safety climate as a moderator and that promote more opportunities for employees to think outside the box and gain new knowledge. Moreover, when this structural model occurs, trust in the leader shall be the mediator in this relationship (Avolio et al., 2004).

Boerner et al. (2007) conducted a study to examine the impact of transformational leadership on their followers' performances and associated conditions. They found that transformational leaders can enhance employees' performances by reinforcing task-related debates between the employees. Debate was identified as arguments and entering into a hot discussion about assigned assignments. Therefore, it exceeded the job requirements by expressing the different views of the group in which it entitles taking risk. The risk in these debates lies in the mutual arguments between the followers in which it includes transforming invisible conflicts into apparent conflicts at the group and organisational level (Gebert et al., 2006).

For followers to be creative and outperform, variations in terms of perceptions and concepts should be visible and shared with other members. In this way, individual's expressions, ideas, views and concepts can be evaluated, amended and then reproduced into a new way that leads to a higher level of learning and performance (Gebert et al., 2006). Transformational leaders can foster open negotiations and discussions where the risk of talking about individual opinions will be eliminated. The risk is reduced as they develop employees' efficiency and confidence that motivate the followers to engage in constructive discussions. As a consequence, when individuals buy into the overall organisational objectives, they

will engage in open discussions with more confidence and will sacrifice their time and efforts accordingly (Gebert, 2004). Moreover, transformational leaders enhance the common identity between their employees that in turn establishes a sense of safety climate for them to participate in heated conversations and analyse situations with an explosion of different individual's views and aspects (Simons & Peterson, 2000).

Transformational leaders take the lead to perform difficult missions and consider their followers' individual differences and developmental needs. They perform as a coach and educator to enhance their followers' capabilities. New potential learning paths are discovered and employed at a high level. They also take into consideration their followers' differences in terms of desires and needs. Thus, they encourage a high level of psychological safety climate that emphasises social exchange with their followers (Boerner et al., 2007).

It has been stated that transformational leaders promote meaning for common values and shared objectives that lead to exceeding followers' outcomes. They provide support and a climate of safety for their followers by building trust and clarity of objectives with discussion of previously associated challenges and encouraging their followers' participation in the decision-making process. Transformational leaders are the type of leaders who gain a wide range of respect and trust from their followers. They are placing themselves as ideal role models for their employees and engage in high risk tasks and pioneer at any new and challenging assignments. In addition, they consider their followers' needs above their own needs and take into account work conditions and requirements. Similarly, they are a role model in terms of compliance with rules and regulations and they perform

in a professional code of ethics. All of those components establish a psychological safety work environment for the followers to outperform (Bass & Riggio, 2006).

Transformational leaders promote their followers toward creating a common vision for future strategic objectives, which attracts their followers' interests and provides optimism. Thus, they create team spirit that can eliminate any associated conflicts, and they discuss them openly and freely toward shared objectives. They always propose questions, discuss their followers' concepts and deal with old problems in new approaches. In addition, there is no blame over any individual mistakes, rather, constructive discussions take place to reframe the problems and propose new work methodologies (Podsakoff et al. , 2000).

Other researches have studied an organisations citizen's behaviours that are not necessarily required for the job; however, it is important for the efficiency of the whole organisation and must be performed by the transformational leaders (Podsakoff et al., 2000). Three concepts have been highlighted in this regard: helping behaviour, sportsmanship and conscientiousness. Helping behaviour is about combining and deploying best practices among team members, which by nature reduces team conflicts and encourage a high level of safety and performance as a result. By performing sportsmanship behaviour among the team, less time and efforts is spent on functionalities; rather, the members take advantage of catching hidden opportunities. Transformational leaders can increase their followers' conscientiousness by empowerment and assigning ownership. Transformational leaders shape their followers' identities by creating meaning with objectives and associated problems. The continuity of the inspirational approach of those leaders will establish a social identity. A shared identity for the organisation community

would be translated into a psychological safety culture where individuals are helpful, perform sportsmanship behaviour (i.e. look at the problems as a common goal to be resolved) and increase the individual's conscientiousness (Podsakoff et al., 2000).

Based on the above-mentioned arguments, the below hypothesis is proposed:

- ❖ H5: Transformational leadership is positively associated with psychological safety.

## **2.9 Psychological Safety and Learning Goal Orientation**

Chadwick and Raver (2015) defined two types of learning attitudes for individuals and groups. One of them is learning goal orientation/mastery goal orientation. Individuals with learning goal orientation believe that their skill sets are changeable and can be improved based on the situation. In this section will argue how psychological safety translates into learning goal orientation.

In a psychological safe work environment, employees tend to engage in high risk activities and share a general feeling of confidence to express their points of views and discuss their mistakes (Edmondson, 2002). Such environments have been considered as a basis of organisational development of new technologies. Moreover, this type of climate encourages employees to voice and discuss their findings and progress of their tasks, which in turn involves acting on critical knowledge from each other (Edmondson et al., 2001; Edmondson, 2002). It has been argued that having a psychological safety environment encourages a more creative work environment, which by default involves risk taking and introducing uncertain conditions (West & Richter, 2008). According to Kark and Carmeli (2009) a psychological safety environment is crucial in research and development teams as it involves high risk

with uncertainty, which can lead to improper consequences. As per Edmondson (2002, 2003) the psychology safety context is an essential factor that can promote group members to learn regardless of their initial goal orientation preferences. That is why Chadwick and Raver (2015) proposed that mastery (learning) goals can be emerged in a specific context when leaders promote a psychology safety environment.

As mentioned earlier, learning goal orientation enhances innovation and creativity (Janssen & Van Yperen, 2004; Zhou, 2003). This was supported by Baer and Frese (2003) when they argued that initiating a climate of psychological safety established the setting for employees to engage in high risk projects and produce new knowledge in more innovative and different approaches. The same study also supported the idea that psychological safety is not a factor that has been produced within the team level only, rather, it is an overall organisational climate where everybody can feel safe and work becomes more professional.

Moreover, Gong et al. (2013) found that there was a positive indirect relationship between individual creativity and team creativity with goal orientation via the information exchange process, which is stronger with learning goal orientated individuals and teams. Their results were based on goal preferences scholars (i.e. what teams want to accomplish) and goal striving (i.e. the plans and strategies to achieve the objectives) as the basis of individual's motivational factors to achieve their goals (Chen & Kanfer, 2006). Their study highlighted that a shared learning goal orientation would encourage individuals and teams to seek out and exchange information, as well as learn from others (Bunderson & Sutcliffe, 2003; Gong & Fan, 2006).

If we look at the organisational behavioural literature that have studied the role of psychological safety on individuals' learning behaviour, we will discover that a lot of findings shed light on the positive effect of that aspect (Carmeli et al., 2009). Some of them showed that the quality of the relationship determined the level of psychological safety in a specific team and mentioned that when people created a high quality emotional relationship with others, they would express their feelings and negative emotions freely without the fear of negative reactions (Carmeli et al., 2009). Moreover, they mentioned that a relationship with flexibility would allow the relationship to recover after conflicts and would not affect their interactions. Losada and Heaphy (2004) also addressed that connectivity between individuals is very important as it makes individual feel comfortable to connect and engage in new and high-risk assignments without the concern of having a bad image. Another important element for having a high quality psychological safety relationship is to have a positive regard. When individuals feel that he/she is important and respected from others for their role, experience or knowledge, they would outperform and improve their learning behaviours (Carmeli et al., 2009). This was also stated by Edmondson (2004) when she mentioned that when people feel that their competencies are watched and recognised, they will do their best to maintain their good image. Thus, when individuals have the sense of being recognised, they will be open to speak up, provide feedback about challenges and thoughts and engage in learning activities (Dutton, 2003; Zander & Zander, 2000). Carmeli et al. (2009) indicated that when a type of the relationship allowed individuals to actively participate in an activity, this would allow for a climate of safety and enhance learning accordingly. Based on the above arguments, the following hypothesis is proposed:

- ❖ H6: Psychological safety is positively associated with learning goal orientation.

## **2.10 Transformational Leadership and Learning Goal Orientation**

This section will be led by the ‘Achievement Goal Theory’ that is concerned with how individuals set different ‘Goal Orientation’ based on their beliefs and abilities (e.g., Covington, 2000; Dweck, 1986; Pintrich et al., 2003). Goal orientation refers to the reactions of individuals, groups and organisations toward targets (Porter, 2008) and, in turn, it affects how individuals—separately or collectively—deal with situations, understand, analyse and act when in different encounters and obstacles (Button et al., 1996; Poortvliet et al. , 2007).

Hannah and Lester (2009) argued that; leaders’ draw the method of analysis and react toward situations for their group members as well as create the beliefs among their group members. Group members tend to draw their goal orientations based on their personal choices; however, the leader has a strong influence for transforming the type of group members’ goal orientation. For example, if the team leader encourages team members toward explorative learning behaviour then the team members will feel that this is the proper way of performing tasks according to the context and it will be mastery group driven. In contrast, if the team leader promotes exploitation learning behaviour, then it will be a performance goal orientation group looking to prove their competencies and avoid negative impact (Chadwick & Raver, 2015).

Dweck and Leggett (1986) presented a motivational model that described how individuals could use their existing skills, acquire new skills and transfer their skills and abilities to similar situations. In their model, they concentrated on individual psychological factors that affected their reactions and how they gained new skills and applied them.

Table 1: Achievement Goals and Achievement Behavior

<b>Theory of intelligence</b>	<b>Goal orientation</b>	<b>Confidence in present ability</b>	<b>Behaviour pattern</b>
<b>Entity theory (Intelligence is fixed)</b>	Performance goal (Goal is to gain positive judgments/avoid negative judgments of competence)	If high But If low	Mastery-oriented (Seek challenge, high persistence). Helpless (Avoid challenge, low persistence).
<b>Incremental theory (Intelligence is malleable)</b>	Learning goal (Goal is to increase competence)	If high Or Low	Mastery-oriented (Seek challenge that fosters learning, high persistence).

Source: Dweck (1986)

Table 1 indicates that different intelligence theories direct the way that individuals shape their goals. Individuals who believe that abilities are fixed tend to perform toward gaining positive patterns or avoid engaging to maintain their regular pattern (performance goal). On the other hand, individuals who believe that abilities are dynamic and adaptive tend to develop their skills and abilities toward improving their performance (learning goal). Their determinants of goals will then shape their behavioural trend.

To continue what Dweck (1986) discussed, Heyman and Dweck (1992) added to the motivational model by considering the intrinsic motivational factors of individuals as well as considering challenging perspectives of individuals. Their modified model indicated that individuals who believe in goal learning enjoy the challenges and accept obstacles as part of their learning journey. They also choose



long term goals that serve their social goals and professional goals rather than short term goals. Here, failure does not reflect individual deficiency, but it is an opportunity of learning and acquiring new methods and strategies.

From the transformational leadership and learning goal orientation perspective, many studies have shown that transformational leaders play a vital role in enhancing employees' creativity, exploring new approaches, exploiting existing knowledge, updating knowledge and establishing a context of organisational learning among their individuals (Aragón-Correa et al., 2007).

Fisher and Ford (1998) validated the motivational model on trainees. Their study's purpose was to measure how different individuals' motivational goals influence the amount and type of effort in their learning. They found that learning goal oriented trainees tend to spend more effort and apply complicated strategies in their learning; however, performance goal oriented trainees tend to spend a lower amount of effort and utilise less complicated strategies in their learning.

Dweck and Leggett (1988) upgraded the initial work undertaken regarding achievement goal theory and the motivational model by providing a generality of the model as shown in Table 2 below:

Table 2: Generalization of Model to External Attributes

<b>Theory</b>	<b>Goal orientation</b>	<b>Predicted pattern</b>
Entity  Attributes of people and world are fixed or uncontrollable	Judgment  Goal is to make positive or negative judgment of attributes	Behaviour: Low initiation of and persistence toward change  Cognition: Rigid, over-simplified thinking  Affect: Evaluative affect such as contempt
Incremental  Attributes of people and world are malleable	Development  Goal is to understand and improve attributes	Behaviour: Mastery oriented goal pursuit  Cognition: Process analysis  Affect: Empathy

Source: Dweck and Leggett (1988)

Dweck and Leggett (1988) reached the conclusion that individuals' differing goals will be aligned to their general performance trend within their work group and then will be inherited into routines. This creates an entity of organisational learning, which might be extended to individual general and social life, because people tend to act based on their cognitive orientations.

From another viewpoint, March (1991) discussed exploration versus exploitation in organisational learning. Exploration depends on experiments and discovering new options and consists of high risk and high possibility of failure and negative outcomes. However, exploitation relies on repeating positive experiments and filtering successful methodologies toward duplicating the same competencies and using the same techniques and it is mostly aligned with predictable outcomes. From this discussion, Chadwick and Raver (2015) linked the individual goal

orientation with exploration and exploitation tendencies, i.e., that learning oriented individuals are associated with exploration by nature, whereas, performance oriented individuals are associated with exploitation.

To link the transformational leadership style with one type of goal orientation (learning goal orientation), the business level strategy typology of Miles and Snow (1978) and Nahavandi (1993) has been utilised when they argued that the analyser strategy was used by transformational leaders. They would draw the way of learning within the organisation as a dynamic and ongoing context of organisational learning. The analysis strategy of the transformational leadership is associated with discovering new skills, accepting challenges as ways of improvement, flexibility in the work environment, and open culture and adaptable work procedures and systems. From the above-mentioned arguments, the below hypothesis is proposed:

- ❖ H7: The effect of transformational leadership on organisational learning will be mediated by learning goal orientation.

### **2.11 Learning Goal Orientation and Organisational Learning**

Chadwick and Raver (2015) proposed a new way to look at the organisational learning different to the previous studies of organisational learning and achievement goal theory. They mentioned that new studies should pay more attention to the motivation side of this area, i.e. what makes some individuals, groups and organisations learn more than (or less than) others despite similarity of capabilities.

Discussing individuals with learning goal orientation, such individuals are faster in learning new skills to accomplish new assignments and also would expend

greater efforts to improve their competencies with less worries and more confident position (DeShon & Gillespie, 2005; Payne et al., 2007).

Chen and Mathieu (2008) shed light on the situational factors that affect the performance of the individuals in addition to their individual goal orientation differences. This approach helps understand how individuals differ in responding to new conditions and adapting with new changes. This point was supported by Chen (2005) and Thoresen et al. (2004) who both proposed that organisational changes including transition periods enforced individuals by default to learn new skills or use existing skills to adapt to new changes and situations.

Learning goal orientation is about the capability of superior engaging in challenges to learn new skills and new knowledge and it involves deep processing of analytical strategies (Elliot & McGregor, 2001). The deep processing came from the desire to be dominant on deep understanding of the task and outperform it (Janssen & Van Yperen, 2004). Moreover, in depth engagement on the task analysis and performance results in more creative behaviour and innovated approaches (Amabile, 1996). In addition, individuals with strong learning goal orientation attributes are usually involved in high challenging tasks and uncertain situations that involve applying creative approaches to exceed expectations by definition (VandeWalle, 1997). Learning goal oriented individuals might be attached to the relevant skills of the performance tasks and these types of activities will assist creativity and innovation to emerge (Amabile, 1996). Discussing creativity, scholars mentioned that creativity drives for gaining new knowledge and learning new strategies are essential for organisational learning and development (Janssen & Van Yperen, 2004; Zhou, 2003). Therefore, to earn this knowledge and obtain new learnings, a strong

learning orientation should occur within teams (Dweck, 1999). Learning goal oriented individuals tend to find new solutions to overcome challenges, which generates new skills and learning (VandeWalle et al., 2001). Similarly, learning goal individuals tend to accept feedback (negative and positive) and apply aligned resolutions to solve work problems (Dweck, 1999).

Kozlowski et al. (2001) investigated the impact of learning goal orientation and performance goal orientation on training output. The training output included explicit knowledge, knowledge structure and trainees' efficiency. The authors then tested the impact of these training outputs on performance by increasing the complexity of the assigned tasks. The results of their study indicated that learning goal oriented trainees were more motivated and engaged in the complex training missions than the performance oriented trainees. In addition, the learning goal oriented trainees affected the anticipation of performance adaptability of the participants. They stated that learning goal trainees were more attentive to unfamiliar and difficult tasks and they approached uncommon tasks for the purpose of development and growth. They trusted their competencies and believed that their capabilities were elastic toward continuous improvements. Similarly, they saw exploration of new ways of adapting processes always leads to new learnings and growth. They mentioned that learning goal oriented trainees were more flexible to face any issues and errors and insist on overcoming these issues. They considered the journey of processing the missions as improvement processes, with failures enjoyable that guide them to learning. Their research supported relevant studies results that learning goal oriented people tend to be positive, motivated, more confident, more efficient, utilise complex strategies and are more adaptable, which

leads to learning and improves overall performance (VandeWalle et al., 2001; Earley & Ang, 2003).

From another perspective, Gong and Fan (2006) examined the relationship between learning goal orientation and cross-cultural modifications (i.e. dealing with new cultural differences). They conducted a longitudinal field study and found that learning goal orientation was positively associated with academic and social adjustments and mediated through self-competency. They grounded their research based on Dweck (1986) who found that when learning goal oriented individuals hit barriers, they persist to manage them by trying different scenarios, constant constructive feedback, continue on proposing new paths and seeking a challengeable goal. Moreover, learning goal orientation is connected with efficiency and learning acquisition (VandeWalle et al., 2001). Their cognitive and behavioural traits of adaptability provide them with self-efficiency that improves learning and performance. Dealing with new cultural aspects requires high levels of flexibility that enable the gaining of new knowledge, becoming familiar with new rules and being efficient (Earley & Ang, 2003). Learning goal oriented individuals tend to be a master in leading changes and managing new situations, which is attached to the competencies required to deal with cross-cultural adjustments (Earley & Ang, 2003; Ward et al., 2001). The learning goal oriented individuals have competencies in controlling pressure, and maintaining less confusion and less worries that are essential to apply when dealing with cultural accommodations (Earley & Ang, 2003). This process improves self-efficiency, which is creating a learning model while processing cultural differences. Based on the above-mentioned arguments, the below hypothesis is proposed:

- ❖ H8: Learning goal orientation is positively related to organisational learning.

## **2.12 Transactional Leadership and Organisational Learning**

Burns (1978) identified a transactional leader as one who performed as the authority and supervision was his/her right within the organisation. He stated that transactional leaders were keen to set performance goals and obtain employees' adherence. In addition, transactional leaders focus on work regulations, standards and task assignments. Moreover, they utilise accountability principles in their leadership style by applying reward and punishment systems on the employees' performance, which in turn influences employees' productivity. This was confirmed by Al-Mailam (2004) when he mentioned that; transactional leaders could be relied on to increase employees' production by the factor of change being adapted by this type of leader.

The transactional leadership style has been described as a contractual relationship between the employees and their leaders via establishing performance goals and monitoring the outcomes (Bass & Avolio, 2000). They apply incentives and punishment systems by evaluating the outcomes and accomplishments of assignments (Antonakis et al., 2003). In the same manner, Zagoršek et al. (2009) stated that transactional leaders control their assignments by applying policies, directions, manuals and reward systems. This type of leadership enhances employees' commitment and engagement via clarification of a defined goals and constant feedback regarding the progress of the implementations, which enhance the overall organisational performance, changes the culture and updates its strategies accordingly (Bass & Avolio, 1993).

Transactional leadership can be categorised into three models: contingent reward, active management by exception and passive management by exception. The first model is about creating a safe work environment, clarifying the task roles and requirements and offering rewards upon accomplishments of the desired tasks. The second model is about the leaders' concerns to follow formal rules and standards. The third model is when the leader will not change any situation or old work routines until it becomes a serious issue (Antonakis et al., 2003). However, Bass et al. (1987) said that transactional leadership can be classified into two models: passive or active. Passive transactional leaders or management by exception leave the situation as it is, as long as everything is working. However, if something goes wrong, this type of leader will take an action that impedes negative content. In contrast, active transactional leaders enhance their followers' performances by having good information about the current work process, identifying what is required by the followers to achieve the goals, set clear goals and reward their followers for achieving the objectives.

It has been stated by Vera and Crossan (2004) that a transactional leadership style can promote organisational learning but only on specific conditions either in exploration (feed-forward learning) or exploitation (feedback learning). They proposed that transactional leaders enhance employees' compliance in the existing policies and procedures. In addition, they mentioned that transactional leadership can enhance the refreshment and refinement of current learning.

Bryant (2003) provided a conceptual framework of the role of transactional leadership on knowledge at three levels of the organisation (individual, group and organisation). He expressed the knowledge activities at each level of the organisation



and the related leadership style. This has been grounded on Nonaka and Takeuchi's (1995) research that knowledge is being created at the individual level and group interaction level and sharing at the group level. Finally, knowledge utilisation would occur at the organisational level via coordination with multiple stakeholders and converted into services or products (Boisot, 1998).

Table 3 indicates the impact of transformational and transactional leadership on knowledge.

Table 3: The Impact of Leadership Styles on Knowledge

<b>Level</b>	<b>Knowledge Creation</b>	<b>Knowledge sharing</b>	<b>Knowledge Exploitation</b>
<b>Individual</b>	Transformational: Creativity and innovation		
<b>Group</b>	Transformational: Innovation	Transformational: Integration and shared mental models	Transactional: Coordination
<b>Organization</b>			Transactional: systems and institutionalization

Source: Bryant (2003)

At the individual level, transactional leadership is not the best way to lead, because they tend to over assert goals and regulations that hinder the creativity and generation of new ideas, and shifts the concentration on the details of the tasks and goals (Conger & Kanungo, 1998). Transactional leaders also will not support and reward any initiatives or ideas that are not geared directly to their plans and goals. For instance, if a plan was set for computer engineers to state the issues in a specific application and while doing their update process they discovered a new way to update their applications, then the transactional leader would reject and not support

this idea as it is not providing the direct goal outcome, which is finding the program issues. At the group level, transactional leaders tend to re-enhance the policies and rules adherence that kill creativity of new ideas. For instance, if a transactional leader gathers a multidisciplinary team consisting of engineers, network developers, and so on for the goal of applications update brainstorming and if the team generates new ideas that are beyond the defined goal, then the transactional leader will not give attention to the new ideas that are outside the team scope, even if they are beneficial to the organisation. At the organisational level, knowledge is converted into more systematic principles and upper management requires more executives who can control and manage knowledge and learning. Executives at this level would be keen enough to create a bold system for knowledge sharing and exploitation. Accordingly, transactional leadership would be more efficient at the institutionalisation level. Transactional leaders are more competent to establish the structure for sharing the knowledge with all stakeholders and to control the flow of using the knowledge and monitoring performance progress accordingly (Bryant, 2003). Based on the above-mentioned arguments, the below hypothesis is proposed:

- ❖ H9: Transactional leadership is positively related to organisational learning.

### **2.13 Transactional Leadership and Performance Goal Orientation**

Hamstra et al. (2014) adopted the first study to measure the relationship between leadership style and employees' goal orientation and they found that leadership styles can promote the goal orientation among their followers based on the overall objectives of the organisation. They found that transactional leaders can promote a performance goal orientation among their followers. They began their argument by proposing that leaders have a strong influence in changing the social

context of employees that affects in turn their motivational experience and goal orientation. Moreover, they based their argument on the influence of leaders on forming employees' directions and setting their goals in the organisational context. The study explained that performance goal oriented individuals show their competences compared to others or in other way when individuals do better than others (Elliot, 2005). When individuals concentrate to do better than others, the focus is on their personal standards that usually appear in high levels of performance (Lee et al., 2003; Van Yperen, 2006). Hamstra et al. (2014) found that transactional leadership was positively related with performance goals. Their study contributed to this area by adding empirical knowledge of the impact of leadership style perceptions on their followers' goal orientations. Transactional leaders can create performance goal orientation within their followers. The finding supported previous studies that transactional leadership is positively linked with performance goal orientation (Cellar et al., 2011; Hulleman et al., 2010; Janssen & Van Yperen, 2004; Judge & Piccolo, 2004; Payne et al., 2007). Leadership style can be promoted contingently based on the context and situational requirement of the organisational performance and since this section is discussing transactional leadership, then this rule is applied by default (Darnon et al., 2009). Therefore, for a context where the organisations want their employees to outperform each other, a transactional leadership can be engaged.

Conversely, many studies have shown that usually an individual's goal orientation can be changed based on the situation and individuals may aim for different achievement goals in different contexts (Fryer & Elliot, 2007; Van Yperen et al., 2011). Leadership style was one of the antecedents studied by authors that can change the motivational goals of employees toward collective goal orientation (Elliot, 2005). At the same aspect, Hannah and Lester (2009) stated that leaders

could transform the team's norms and goal orientations based on their context and directions.

Transactional leaders set the rewards contingent on a specific achievement; therefore, individuals might perform on a notable level but away from others, which will reduce communication and cooperation with other teams (Kahai et al., 2003). Similarly, it has been mentioned that; transactional leaders create a competitive work environment that forces individuals to attain an outstanding performance to achieve the contingent reward (Bolino et al., 2002; Cabrera & Cabrera, 2005). When individuals know that their performance will be evaluated and monitored, they will always measure their performance based on the applied standards (Sarin & Mahajan, 2001).

Caillier and Sa (2017) conducted a longitudinal examination on the impact of transactional leadership on whistle-blowing in U.S. federal agencies. The study results revealed that there was a positive relationship between transactional leadership and whistle-blowing attitude but at a lower extent than the effect of transformational leadership. Whistle-blowing behaviour means reporting or uncovering wrong practices and incompliance of rules and polices. People might have a fear of reporting improper doings because of the threat of revenge (Mesmer-Magnus & Viswesvaran, 2005). Researchers have also linked the power theories with whistle-blowing attitudes. It has been mentioned that when an individual holds a high level of power and high level of performance then this would be more intended to whistle-blowing than a low level of power and low level of performance (Caillier, 2012–2013). The reason is that; the greater the power held by the employee, the stronger the relationship between the manager and the employee. That is why an

employee's power and strong relationship with their manager would protect the employee from revenge. Related to the relation with transactional leadership, as mentioned earlier this type of leadership would have an agreement with the followers and would offer compensation based on the achievements of the followers (Deichmann & Stam, 2015). Transactional leaders communicate clear goals, look at the progress and remunerate the followers or punish them based on accomplishments and assigned goals. To support what has been mentioned earlier about the transactional leadership, there are three behaviours, i.e. they could offer a rewards and punishment system based on the clarified expectations and aligned outcomes, which is called contingent reward; they could monitor the progress and take corrective actions during the processes, which is active management by exception; or the leader could wait until errors take place and then take action, which is passive management by exception (Bass et al., 2003). Transactional leadership motivates the individual goals more than the organisational goals and it is considered the basis of leadership styles (Hamstra et al. 2014).

Kaplan and Flum (2010) reviewed multi-conceptual findings regarding the adoption of the goal orientation, mental style and identities. In addition, they reviewed the situational and contextual impact on individuals' goal orientation and identity creation. Performance goal oriented individuals tend to be involved in the achievements for enhancing their image among the other co-workers or avoid spending much effort in uncertain tasks to protect their positive reputation and performance. Their interest is to show high competencies over their colleagues and they are concerned about the perceptions of others toward them. They are keen to make public recognition of their high competencies and show their outstanding performance. Thus, their impression of self-worth is temporary and contingent on the

significance of others and their power. Their performance and abilities would be constrained based on the recognition standards, the reward system, less efforts and attempting to overcome the performance of others. Hence, performance goal oriented individuals will not be motivated to learn and gain new knowledge unless it is linked to self-worth publicity recognition systems (Leary, 2007).

Mascaret et al. (2017) found that the stronger the performance goal oriented leaders, the stronger impact on the followers' performances and socialisation in the organisation. They grounded their study based on prior research that performance goal oriented individuals might lose their motivation and decrease their job satisfaction and performance in the long run, which might be due to the performance goal orientation of their leaders (Stoeber et al. 2008). Some found that when employees handled a challenging task, there was no link with their manager performance goal orientation (Preenen et al., 2014). Franklin et al. (2013) supported that a leader's performance goal orientation can be a tool to forecast their follower's task commitments and outcomes.

Hornsey (2008) studied the impact of transactional leadership on performance goal orientation through socialisation; when group attitudes influence individual goal orientation to become a collective attitude, direction and behaviours. Grojean, et al. (2004) stated that leaders can really transform the individual's way of thinking and approaches by coaching and mentoring. Hornsey (2008) explained this process in three steps, the first step is the identification process when the person categorises him/herself among the team as a member. Second, the person starts to realise the team values and goals. Third, when the team members start to formalise the team values at a competition shape. This highlights the way the person poses him/herself

among the team and the organisation. For example, when the team consists of an individual with high socialisation identity he/she will be working in the same direction as the leader, but when there is an individual with low socialisation identity; the direction will be different if not the opposite (Martin & Epitropaki, 2001). From the above arguments, the below hypothesis is proposed:

- ❖ H10: The effect of transactional leadership on organisational learning will be mediated by performance goal orientation.

## **2.14 Performance Goal Orientation and Organisational Learning**

Prior studies on performance goal orientation showed less influences in terms of learning but were still inconsistent (e.g., Elliot, 1999; Kaplan & Maehr, 2007). Performance goals have been divided into two types: performance approach and performance avoidance (Pintrich et al., 2003). The difference between the two types is that in the first case, employees tend to engage in assignments that would reflect positive and certain results; in contrast, in the second case employees would avoid engaging in a specific task to avoid negative results (Brett & VandeWalle, 1999). Previous studies have shown that negative results are attached with performance avoidance oriented employees such as low efficacy and worries (Porath & Bateman, 2006; Urdan et al., 2002). However; performance goal oriented employees usually succeed in accomplishing their assignments if the task suits their current skills and when they work in a psychological safe environment (Middleton et al., 2004). From another angle, it has been stated that individual who maintain a performance goal perspective are avoiding challenges and tend to repeat only achievements that they have succeeded at previously and they tend to avoid any new assignments to avoid

failure as they consider the failure as a self-defect and not an area of improvement (Aragón-Correa et al., 2007).

As per a recent study by Alexander and Van Knippenberg (2014) on the effect of goal orientation on radical innovation at a team level, leadership has a strong role to shift the goal orientation of their team members depending on the purpose. For achievement and ideas development, leaders can direct the team toward learning goal orientation. In contrast, for development or incremental progress leaders might aim to promote performance goal orientation. This is what was stated by Payne et al. (2007) when they mentioned that goal orientation can be situational depending on the condition. Prior research has shown that team work would be more effective when the members are being directed by shared understanding and one goal orientation (Salas & Fiore, 2004). As for performance goal orientation, individuals tend to do well in comparison to others or to a certain standard. It depends on the situations, where individuals expect to perform well or expect to face challenges that prevent their good image. Some recent researchers have mentioned that performance oriented individuals might see challenges as chances for learning to express a positive image and these are learning opportunities (Harackiewicz et al., 2002). It has been stated that individuals with performance goal orientation maintain a lower relationship with creativity compared to learning goal oriented people (Gong et al., 2013).

Following the two types of performance goal orientations, Pintrich (2000) mentioned that that might be also the same types of positive and avoidance approaches for the mastery/learning goal orientation. Table 4 indicates the two directions mentioned by Pintrich (2000).



Table 4: Two Goal Orientations and their Approach and Avoidance States

	<b>Approach state</b>	<b>Avoidance state</b>
<b>Mastery orientation</b>	<ul style="list-style-type: none"> <li>- Focus on mastering task, learning, and understanding.</li> <li>- Use of standards of self - improvement, progress, deep understanding of task.</li> </ul>	<ul style="list-style-type: none"> <li>- Avoid not learning or not mastering task.</li> <li>- Use of standards of not being wrong, not doing it incorrectly relative to task.</li> </ul>
<b>Performance orientation</b>	<ul style="list-style-type: none"> <li>-Focus on being superior, besting others, being the smartest, best at task in comparison to others.</li> <li>- Use of normative standards such as getting best or highest grades, being top or best performer in class.</li> </ul>	<ul style="list-style-type: none"> <li>- Focus on avoiding inferiority, not looking stupid or dumb, in comparison to others.</li> <li>- Use of normative standards of not getting the worst grades, being lowest performer in class.</li> </ul>

Source: Pintrich (2000)

The difference between the two approaches (mastery and performance) is that the standard of evaluation is in comparison to others in terms of performance goal orientation; however, in the case of mastery individuals compare themselves based on their own performance or the assigned task. Those concepts have not been operationalised or tested to date; therefore, an example might provide a clearer picture. For the high performance of a student, when the instructor gives a class a reading task to spell out the words at the students' own spelling; at somehow it pursues the student to be innovated. In this case, the perfect student might compare self to the task and not want to lower his/her level less than an excellent level. Therefore, the student would avoid the task or ask for help (mastery orientation). On the other hand, performance oriented individuals compare themselves to others and

try not to engage in a task that they think contains negative outcomes or they are not guaranteed positive results. From the above arguments, the below hypothesis is proposed:

- ❖ H11: Performance goal orientation is positively associated with organisational learning.

The strength of this relationship will be less strong as compared to the strength of relationship between learning goal orientation and organizational learning.

## 2.15 Research Model

Taking into consideration the available efforts in the literature and the above predictions in the format of hypotheses, below (Figure 1) is the research model.

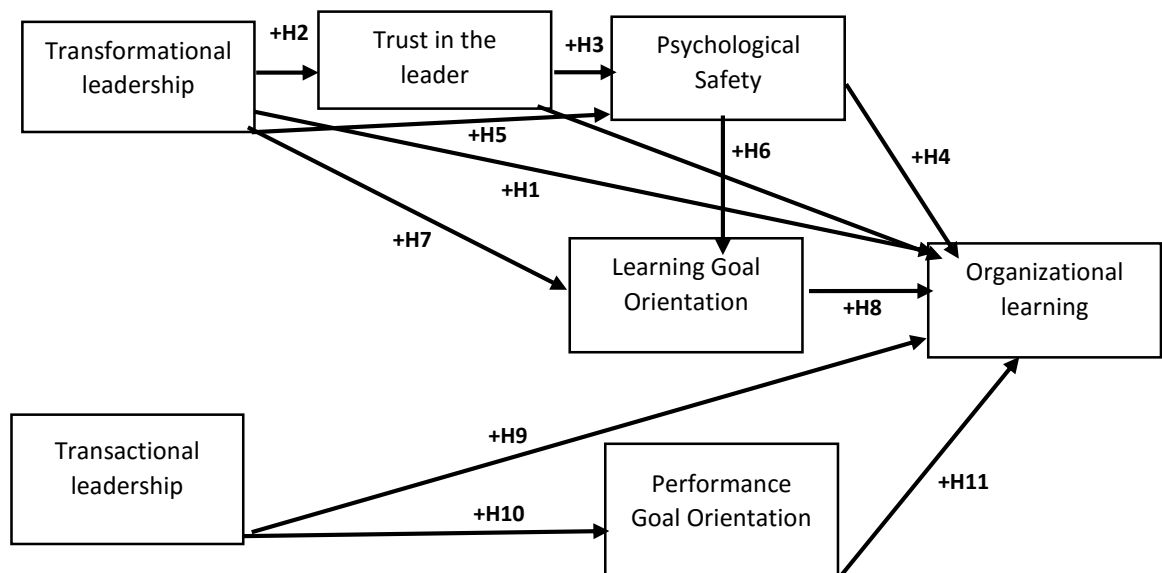


Figure 1: Research Model

## **Chapter 3: Research Methodology**

### **3.1 Introduction**

Prior to the statistical analysis, this section will discuss the study design, data source, field access, procedures and measuring scales used. Basically, it will show the operationalisation of the constructs and the instruments used to measure them. Furthermore, it identifies the data sources and associated data collection procedures, before examining the methods of analysis to overview the data analysis techniques and profile of the respondents.

### **3.2 Research Epistemology**

Quantitative methodology is applied in a wide range of contexts in social reality as it permits the translation of a social phenomenon into analytical numbers. Data is being collected in the form of numbers in order to introduce the evidence in a quantitative approach (Neuman, 2003; Sarantakos, 2005).

Research paradigms depend on what is called 'Ontology' (what the real truth is) and 'Epistemology' (how I know it is the true reality) (Neuman, 2003; Ulin, Robinson & Tolley, 2004). As the current research will be using existing literatures to measure the research constructs and there is already knowledge created about the research question and topic, then the research paradigm will be positivism. The positivist research paradigm is concerned with measuring constructs/variables, testing hypotheses and analysing the data that are explained into a causal framework or phenomena (Sarantakos, 2005; Marczyk, DeMatteo & Festinger, 2005).

The positivism paradigm is based on the concept that there is a governing law over a social phenomenon and researchers have agreed that quantitative methodology is the research of regulations that is correct at the time and under all given situations (Cohen, Manion & Morrison, 2000).

The research methodology is classified as a research strategy to determine the ontology and epistemology of the research (Sarantakos, 2005). After choosing the research framework, then the research 'operationalisation' occurs (Heyck & Simon, 2005). Operationalisation is defined as the process of measuring a phenomenon that is not directly measured through its existence as indicated by other phenomena. Thus, this process involves clarifying an ambiguous concept and ensuring it is clearly explained and measurable via empirical investigations and evidence (Lukyanenko et al., 2014).

This process begins with developing hypotheses related to the research topic based on related literature from the same research area and in a UAE context. Then, mathematical measurement is applied that is applicable to the quantitative methodology. Quantitative data are translated into numerical forms such as statistics and percentages that produce their results via cross-sectional analysis, and can be generalised to larger populations (Given, 2008). The quantitative data can be gathered via surveys that are defined as a predetermined set of questions given to a number of individuals (Shaughnessy & Zechmeister, 1985).

The literature available in the context of social science studies includes cross-sectional studies, which are a type of observational study that analyses data collected from a population, or a representative sample, at one specific time. Typically, social science cross-sectional studies use regressions for the purpose of sorting out the

existence and magnitude of the causal effects of one or more independent variables on a dependent variable of interest at a given point in time (Given, 2008). The present study uses a comprehensive cross-sectional survey developed after the operationalisation of seven research model constructs to test the identified hypotheses with the aim of answering the research questions.

### **3.3 Study Design**

The main research objective was to measure the impact of transformational and transactional leadership styles on the organisational learning in the context of health care at Al Ain governmental health care entities governed by SEHA. This study was designed in three phases. The first phase handled reviewing the literature in the organisational learning field and leadership impact in this area. During the course of this, two independent variables were selected, namely transformational leadership (TFL) and transactional leadership (TRL). Similarly, one dependent variable was selected, which is organisational learning (OL). In light of that, three mediators were selected, namely trust in the leader (Trust); learning goal orientation (LGO) and performance goal orientation (PGO). One more variable was selected as a consequence of the trust in the leader which is psychology safety (PS). Accordingly, the research model was developed for testing, along with the associated predictions developed in the form of hypotheses.

The selection criteria on the above model was based on their implications in the context of organisational learning and the personal motivation toward providing a beneficial empirical model that enhances organisational learning in the context of the employer (health care context). Moreover, since no studies have examined these implications in the context of the UAE, the current research began by examining the

validity of each variable, after which the moderation effect on them was examined. Besides all of that; relevant literatures gaps were discussed earlier in the first chapter and second chapter too and those were the main ground of creating this study model.

The second phase of this research involved identifying suitable measurement tools for each of the identified variables, ensuring their statistical quality and applicability in the context of health care and relevant studies of the antecedents of organisational learning.

The third phase of the research involved collecting data via the survey method. Then, the research model and associated hypotheses were applied to the collected data. The research was concluded by suggesting a number of managerial and practical implications, which are discussed, together with the study's limitations and possible future directions for research, in the last chapter of the study.

### **3.4 Measures/Instruments used to operationalise the Research Model**

The current study research model had seven constructs (two independents, one dependent and four mediators) and the survey included six sections, with seven measurement scales, in addition to the first section that asked for each respondent's demographic and socioeconomic information (see Appendix 1). Below is a list of the measures used for each construct as the below:

Transformational and transactional leadership: The most commonly used measure in related literature is the multifactor leadership questionnaire (Short Form 5X) proposed by Avolio and Bass (1995). This was used to measure transformational and transactional leadership styles as the employees perceive it. A five-point Likert-type

scale was used to measure the perceptions of the employees towards their direct senior leadership style.

Transformational leadership measurements (fourteen descriptive statements) were drawn based on three items: charismatic leadership (the extent to which the leader inspires, respects and provides faith to his/her employees); individualised consideration (the amount of support given from the leader to the employees) and intellectual stimulation (when a leader encourages followers to rethink on the way they are performing work). These measurements were realised via descriptive statements such as: charismatic leadership (“My direct senior heightens my desire to succeed”), individualised consideration (“My direct senior treats me as an individual rather than just as a member of a group”) and intellectual stimulation (“My direct senior suggests new ways of looking at how to complete assignments”).

Transactional leadership (twelve descriptive statements) was measured based on two items: contingent reward (the degree to which the leader provides a return for a specific behaviour) and management by exception (the extent to which the employees hear from their leader only when failure happens). These measurement items were realised via descriptive statements such as contingent reward (“My direct senior makes clear what one can expect to receive when performance goals are achieved”) and management by exception (“My direct senior waits for things to go wrong before taking action”).

Trust in the leader: Due to individual differences and social context effects, there are many scales utilised to measure trust (e.g. Rosenberg & Wilbrandt, 1957; Rotter, 1967; Wrightsman, 1964). However, few studies have measured trust based on employee confidence and respect in their leader (Shure & Meeker, 1967).

The development of the present scale was based on a study by Bartram and Casimir (2007) who argued that trust can mediate the relationship between the followers and the transformational leader. The scales were created based on two concepts: (i) faith in the trustworthy intentions of others, and (ii) confidence in the ability of others, yielding ascriptions of capability and reliability (Cook & Wall, 1980). In the present study, four items were quoted from Cook and Wall's (1980) Interpersonal Trust at Work scale. One item was obtained from Bartram and Casimir (2007) study based on their theoretical discussion ("My direct senior can be relied on to uphold my best interests").

Moreover, to operationalise trust in the leader construct this research used McAllister's (1995) scales. Drawing on related literature that measured trust from the perspective of the followers (Johnson-George & Swap, 1982; Rempel et al., 1985; Rotter, 1971), trust in the leader construct obtained seven scales from their created measurement pools that are related to this study. The scales were classified into two forms of trust, the first one was affect-based trust ("the emotional ties linking between individuals provides trust") (Pennings & Woiceshyn, 1987; Rempel et al., 1985) and the second one was cognition-based trust ("I choose the person that I trust, under what conditions and I base the worthiness") (Lewis & Weigert, 1985). For example, for the affect-based trust, this descriptive statement is reflective ("I have a sharing relationship with my direct senior, that I can freely share my ideas, feelings, and hopes with my him/her") and for cognition-based trust, this statement is reflective ("My direct senior approaches his/her job with professionalism and dedication"). The scale range was a Likert scale from 1 (Never) to 5 (Always).



Psychological safety: Li and Tan (2013) stated that trust in the leader can be translated into psychology safety and in turn affects employees' performance. In their study, their arguments of psychology safety were grounded on Kahn (1990) whereby the barrier of psychology safety was created from a lack of confidence in the other party. They argued that the more trust in the relationship with the manager, the less uncertainty the employees felt in their workplace, which created a condition of psychology safety as a primary source.

To operationalise psychology safety, three item scales were used by May et al. (2004) ("I'm not afraid to express my opinions at work", "I am not afraid to be myself at work" and "The environment at my work is not threatening") and three from Edmondson (1999a, 1999b) ("No one in the workplace deliberately act in a way to undermine my effort", "If you make a mistake in the workplace, it is not held against you" and "I feel personally attached to my work organisation").

Goal orientation (learning & performance goal): Much literature has developed instruments to measure learning goal orientation and performance goal orientation as a cumulative of the early work performed based on Dweck's (1986) motivational theory. However, most of them were not suitable to be used with adults as several were focused on the situational effects and others did not measure the constructs directly (Button et al., 1996).

Conversely, several previous studies have measured the learning goal and performance goal based on a single value classified as "doing well" or "exceed the expectations" in a particular task. Learning oriented individuals were the ones who exerted the effort and performance oriented were the ones who were doing good. This classification did not measure the reliability and also did not allow the

evaluation of the strength of the individual's goal orientation (Ames & Archer, 1987).

Diener and Dweck (1978, 1980); Licht and Dweck (1984); Stipek and Kowalski (1989) conducted studies that measured goal orientation based on the causal attribution of children. Children's goal orientations were assessed based on the number of times they performed failure to make an effort. Thus, these researchers did not measure the goal orientation directly and the studies did not consider other external factors that affected the attributions of the individuals. Moreover, the measurement tool was designed for children and not suitable for the organisational context (Crandall et al., 1965).

Therefore, this study used a more relevant instrument that overcomes the above mentioned gaps to operationalise goal orientation developed by Button et al. (1996). Their tool was designed for adults and to assess each goal orientation. Moreover, their tool does not compound the dispositional and situational aspect of goal orientation. Taking into account their structure, individuals might hold two types of goal orientation. A five-point Likert-type scale from 1 (a small extent that it is not at all important) to 5 (a large extent that it is very important) was adopted in the study survey.

Organisational learning: Different studies have identified organisational learning from different dimensions; however, most of them were theoretical only without any empirical testing of the identified dimensions (Senge, 1990; Slater and Narver, 1995).

Goh and Richards (1997) used five items to measure organisational learning (clarity of purpose and mission, leadership commitment and empowerment,

experimentation and rewards, transfer of knowledge, team work and group problem solving). Their study was a confirmatory study that is considered as introductory for other researches in terms of scale validity and reliability. Hult, G. T. M., Ferrell and O. C. (1997) conducted a more detailed research considering four dimensions to measure organisational learning (team orientation, system orientation, learning orientation and memory orientation).

This research used the instrument developed by Jerez-Gomez and Valle-Cabrera (2005) that contained some of the items aforementioned above. In addition, they included other scales created by Oswald et al. (1994) to measure the common vision from the perspective of the systems. Jerez-Gomez and Valle-Cabrera (2005) also developed other items based on relative theoretical findings. This was followed by interviewing managers from different firms at the same industry to determine validity and reliability, as well as comprehension of the scale and if it was coherent based on the different manager's responses from the same organisation. Sixteen items were included in the survey, each item was measured using a five-point Likert scale that indicated the individual's level of agreement to the statements with relation to his/her current job and employer and general beliefs.

All the measures used in this study showed good reliability and validity in past studies (Avolio & Bass, 1995; Cook & Wall, 1980; Bartram & Casimir, 2007; May et al., 2004; Edmondson, 1999a; Button et al., 1996; Jerez-Gomez & Valle-Cabrera, 2005). In addition; this study also used the composite reliability to check the reliability of all scales and convergent and discriminant validity to check the validity as well. As a result; all instruments are reliable and valid and this is will be discussed in details in the data analysis chapter.

### 3.5 Control Variables

Research work, such as the current research, that aims to measure cause and effect relationships and hence is designed to explore changes of one item that may cause something else to vary predictably across the related item, defines those changing items as variables. A variable is “any factor, trait or condition that can exist in differing amounts or types” (Miah, 2016). Research models usually have three kinds of variable: independent, dependent, and controlled. In the current research, transformational and transactional leadership are independent variables, whereas organizational learning is dependent variable.

A control variable in an experiment or study is a constant variable used to assess the relationship between two other variables (Business Dictionary, 2017). Because control variables do not change, they allow the relationships between the other variables to be tested in order to be better understood. This relationship is not, however, of primary concern in the experimental sciences (Science Buddies – Science Fair Projects, 2017).

Gender and age are commonly used as controlled variables in social science research, mainly because of Eagly (1987); Eagly and Kite (1987) gender role socialization theory, which argues that the roles and norms of acceptable behavior are different for men and for women. Men usually portray themselves as self-reliant and independent, but women according to the theory represent themselves as interpersonally connected and emotionally expressive. Furthermore, both genders report different levels of workplace victimization, consistent with their prescribed roles, where women label themselves as victims, whereas the notion of victimhood clashes with men’s perceptions of being self-reliant and independent (Nixon, 2009).

In the current research Age, gender, qualification, and experience with current employer and total experience are used as controlled variables. This use aims to highlight the relationship between the organizational learning and the identified antecedents in the research context.

### **3.6 Research Procedures and Data Source**

The survey was approved by the UAE University Ethical Committee, after that an official letter from the research advisor and Doctorate of Business Administrative office was obtained and directed to the training and development department at SEHA to obtain the approval to conduct the survey at Al Ain business entities (Al Ain Hospital, Tawam and Ambulatory health care services). After approval was received, the survey was distributed to 450 employees working at SEHA business entities in the Al Ain region. The survey questionnaires were distributed in hard copy with two versions (Arabic and English) to suit the participant's preferences. The Arabic translation was reviewed by two bilingual experts (doctorate of business students) to verify the clarity of the statements. The questioners were designed to be general without specifying a particular job characteristics or professions, in order to measure the employee's perceptions toward their direct senior leader. The population of this study was a convenient sample of administrative and medical staff (doctors and nurses) from different departments to obtain more relevant and reliable responses. The survey was distributed to 450 employees, from which 390 employees returned the completed survey.

### 3.7 Sample Characteristics

Before testing hypotheses, it is important to analyse the demographic characteristics and basic profiles of respondents. The survey was distributed to 450 employees and the response rate was 87%. In total, the data were collected from 390 respondents out of which 29% were males and 71% were females. The respondents worked at three hospitals from the UAE. The highest ratio of respondents was from the AHS (Ambulatory Health Services) (47%). The majority of the respondents were in the age range from 25 to 40 years (73%) and 70% were married, 26% were single and only 4% belonged to other categories (e.g., widow). Another important characteristic of participants was their qualification. Study respondents were mainly categorised into four qualification categories. Respondents with bachelor degrees represented the highest percentage (48%) followed by high school and diploma holders with 21% and 19%, respectively. Respondents with master/doctorate degrees were at least (12%) among all respondents.

The demographic analysis showed that data were collected from two departments, administration department and medical department. A total of 66% of the respondents were from the administration staff, whereas 34% belonged to the medical staff. Analysing the experience of the respondents in the current organisation, 31% of the employees have more than ten years of experience representing the highest percentage among all categories with respect to experience. Similarly, 28% of the participants had 10 to 15 years of total experience. A detailed analysis is provided in Table 5.

Table 5: Sample Characteristics of Respondents

<b>Item</b>	<b>Description</b>	<b>Percentage</b>
Gender	Male	29
	Female	71
Organisation	Al Ain Hospital	23
	Tawam Hospital	29
	AHS (Ambulatory Health Services)	47
Age	Less than 25 years	5
	25-30 years	23
	31-34 years	26
	35-40 years	24
	41-44 years	10
	45-50 years	7
	51-54 years	3
	55 and above	2
Marital Status	Single	26
	Married	70
	Others	4
Qualification	High School	21
	Diploma	19
	Bachelor	48
	Master/Doctorate	12
Department	Admin	66
	Medical	34
Current Experience	Less than 3 years	24
	4-6 years	21
	7-10 years	24
	More than 10 years	31
Total Experience	Less than 3 years	17
	4-9 years	29
	10-15 years	28
	More than 15 years	24

### 3.8 Chapter Summary

This chapter explained how the research was designed through phases and how the research model constructs were operationalised using existing literatures. Moreover, the questions were anonymous that permitted an opportunity to obtain more participants from different categories and departments and also to reduce the

impact of common method biased (CMB) as will be discussed more in the following chapter (Podsakoff et al., 2003). In addition, this chapter outlined the procedures that were followed to obtain the necessary approval to conduct the survey through the UAE university ethical committee and then through the employer organisations also. Then it provided analysis of the respondents and their demographics.



## **Chapter 4: Data Analyses and Results**

### **4.1 Introduction**

This chapter covers the analysis of data and interpretation of results obtained from the analysis. The analyses were conducted using SPSS and AMOS software programs. In the first step of data analysis, data were removed by handling missing values, identifying outliers and assessing normality. In the next step, confirmatory factor analysis of all studied variables was performed in AMOS. Finally, structure regression (SR) model and PROCESS Macro were used to test the study hypotheses. The direct relationships were tested using SR models, while mediation paths were tested using PROCESS Macro.

### **4.2 Preliminary Data Analyses**

Preliminary data analyses consisted of three steps:

1. Treating missing values
2. Finding aberrant values and
3. Detecting outliers

#### **4.2.1 Missing Values Analysis**

Missing values in data sets is one of the common problems in social and behavioural sciences (Enders, 2010). Although smaller numbers of missing values are not of serious concern, higher numbers can divert the results and make them unreliable. Some statistical analyses cannot be performed if there are missing values present. Therefore, it is recommended by scholars (e.g. Hair et al., 2006) to conduct a careful analysis of missing values before proceeding to further statistical tests.

The data set in the present study was comprised of 390 respondents. The case-wise missing value analysis showed that twelve cases contained only one missing value, only one case contained two missing values and rest of the cases did not hold any missing value. Owing to the very low number of missing values, these were replaced by mean values and all statistical analyses were performed on the 390 respondents. Complete details of case-wise missing value analysis are given in Table 6.

Table 6: Case-wise Missing Value Analysis

		<b>Frequency</b>	<b>Percent</b>	<b>Valid Percent</b>	<b>Cumulative Percent</b>
<b>Valid</b>	00	377	96.67	96.67	96.67
	01	12	3.07	3.07	99.74
	02	01	0.26	0.26	100
	<b>Total</b>	390	100.0	100.0	

#### 4.2.2 Aberrant Values

Aberrant or abnormal values are those that are beyond the normal range of values. For example, in the present study all items of the studied variables were measured using a five-point Likert scale ranging from 1 to 5, therefore any value in the data set greater than 5 or less than 1 was treated as an aberrant value. This was similar for the demographic variable, i.e. gender was measured using two categories: 1 for males and 2 for females. Any value less than 1 or greater than 2 was considered as an aberrant value. Aberrant values can be identified by analysing the maximum and minimum values of each variable. By carefully analysing the maximum and minimum values of each variable in the present study, there were no aberrant values in the data set.

#### **4.2.3 Detecting Outliers/Testing Normality**

Normality of the data is one of the pre-requisites in data analysis. The normality of the data was analysed in the present study by the following series of steps. First, to check the outliers, Mahalanobis distances were inspected and critical chi-square values were determined. The cases with chi-square probability values less than 0.001 were considered outliers as suggested by Tabachnick and Fidell (2007). In the current data set, the researcher found 43 cases were outliers because the chi-square values for these cases were less than 0.001. In the second step, the skewness and kurtosis values were compared before and after removing the outliers. The skewness and kurtosis values did not show any significant difference after removing the outliers; therefore, the outliers were not removed. A complete detail of comparison of skewness and kurtosis values are given in Table 7 and Table 8.

Table 7: Descriptive Statistics (Before removing Outliers)

Items	N	Maximum	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
TF_1	390	5	-0.673	0.124	-0.457	0.247
TF_2	390	5	-0.803	0.124	-0.309	0.247
TF_3	390	5	-1.097	0.124	0.595	0.247
TF_4	390	5	-0.836	0.124	-0.205	0.247
TF_5	390	5	-0.815	0.124	-0.021	0.247
TF_6	390	5	-0.812	0.124	-0.164	0.247
TF_7	390	5	-0.852	0.124	-0.356	0.247
TF_8	390	5	-0.601	0.124	-0.545	0.247
TF_9	390	5	-0.896	0.124	0.076	0.247
TF_10	390	5	-0.872	0.124	-0.102	0.247
TF_11	390	5	-0.664	0.124	-0.293	0.247
TF_12	390	5	-0.774	0.124	-0.402	0.247
TF_13	390	5	-0.773	0.124	-0.299	0.247
TF_14	390	5	-1.094	0.124	0.463	0.247
TRL_1	390	5	-0.538	0.124	-0.411	0.247
TRL_2	390	5	-0.200	0.124	-1.037	0.247
TRL_3	390	5	-0.484	0.124	-0.145	0.247
TRL_4	390	5	0.575	0.124	-0.864	0.247
TRL_5	390	5	0.315	0.124	-1.097	0.247
TRL_6	390	5	0.459	0.124	-1.117	0.247
TRL_7	390	5	0.590	0.124	-0.939	0.247
TRL_8	390	5	-0.369	0.124	-0.636	0.247
TRL_9	390	5	-0.400	0.124	-0.916	0.247
TRL_10	390	5	0.498	0.124	-0.973	0.247

Table 7: Descriptive Statistics (Before removing Outliers) (Continued)

Items	N	Maximum	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
TRL_11	390	5	-0.305	0.124	-1.078	0.247
TRL_12	390	5	-0.719	0.124	-0.287	0.247
LGO_1	390	5	-1.312	0.124	1.306	0.247
LGO_2	390	5	-1.401	0.124	1.284	0.247
LGO_3	390	5	-1.365	0.124	1.322	0.247
LGO_4	390	5	-1.464	0.124	1.536	0.247
LGO_5	390	5	-1.544	0.124	1.317	0.247
LGO_6	390	5	-1.237	0.124	0.900	0.247
PGO_1	390	5	-0.883	0.124	-0.031	0.247
PGO_2	390	5	-0.961	0.124	0.025	0.247
PGO_3	390	5	-1.104	0.124	0.257	0.247
PGO_4	390	5	-0.839	0.124	-0.257	0.247
PGO_5	390	5	-1.261	0.124	1.087	0.247
PGO_6	390	5	-0.981	0.124	0.386	0.247
PS_1	390	5	-0.896	0.124	0.498	0.247
PS_2	390	5	-1.212	0.124	1.148	0.247
PS_3	390	5	-0.526	0.124	-0.570	0.247
PS_4	390	5	-0.989	0.124	0.780	0.247
PS_5	390	5	-0.395	0.124	-0.737	0.247
PS_6	390	5	-0.030	0.124	-0.946	0.247
TRUST_1	390	5	-2.676	0.124	7.892	0.247
TRUST_2	390	5	-1.563	0.124	2.005	0.247
TRUST_3	390	5	-1.279	0.124	0.938	0.247
TRUST_4	390	5	-1.343	0.124	1.297	0.247

Table 7: Descriptive Statistics (Before removing Outliers) (Continued)

Items	N	Maximum	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
TRUST_5	390	5	-1.258	0.124	0.794	0.247
TRUST_6	390	5	-0.602	0.124	-0.475	0.247
TRUST_7	390	5	-1.091	0.124	0.774	0.247
TRUST_8	390	5	-1.086	0.124	0.583	0.247
TRUST_9	390	5	-1.204	0.124	0.876	0.247
TRUST_10	390	5	-1.042	0.124	0.380	0.247
TRUST_11	390	5	-1.121	0.124	0.244	0.247
TRUST_12	390	5	-1.063	0.124	0.339	0.247
OL_1	390	5	-0.715	0.124	0.104	0.247
OL_2	390	5	-0.852	0.124	0.094	0.247
OL_3	390	5	-0.776	0.124	0.152	0.247
OL_4	390	5	-1.267	0.124	1.563	0.247
OL_5	390	5	-0.531	0.124	-0.655	0.247
OL_6	390	5	-1.024	0.124	0.654	0.247
OL_7	390	5	-0.738	0.124	0.004	0.247
OL_8	390	5	-0.576	0.124	-0.390	0.247
OL_9	390	5	-0.631	0.124	-0.292	0.247
OL_10	390	5	-0.769	0.124	0.235	0.247
OL_11	390	5	-0.665	0.124	-0.229	0.247
OL_12	390	5	-0.691	0.124	-0.174	0.247
OL_13	390	5	-0.692	0.124	-0.278	0.247
OL_14	390	5	-0.659	0.124	-0.174	0.247
OL_15	390	5	-1.051	0.124	0.603	0.247
OL_16	390	5	-1.023	0.124	0.430	0.247
Valid N (list wise)	390					

Table 8: Descriptive Statistics (After Removing Outliers)

Items	N	Maximum	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
TF_1	348	5	-0.739	0.131	-0.330	0.261
TF_2	348	5	-0.870	0.131	-0.068	0.261
TF_3	348	5	-1.162	0.131	0.973	0.261
TF_4	348	5	-0.880	0.131	-0.055	0.261
TF_5	348	5	-0.819	0.131	0.060	0.261
TF_6	348	5	-0.852	0.131	0.048	0.261
TF_7	348	5	-0.944	0.131	-0.045	0.261
TF_8	348	5	-0.613	0.131	-0.501	0.261
TF_9	348	5	-0.791	0.131	-0.258	0.261
TF_10	348	5	-0.877	0.131	-0.124	0.261
TF_11	348	5	-0.593	0.131	-0.459	0.261
TF_12	348	5	-0.779	0.131	-0.386	0.261
TF_13	348	5	-0.716	0.131	-0.428	0.261
TF_14	348	5	-1.100	0.131	0.587	0.261
TRL_1	348	5	-0.529	0.131	-0.396	0.261
TRL_2	348	5	-0.212	0.131	-1.006	0.261
TRL_3	348	5	-0.450	0.131	-0.173	0.261
TRL_4	348	5	0.595	0.131	-0.851	0.261
TRL_5	348	5	0.323	0.131	-1.084	0.261
TRL_6	348	5	0.498	0.131	-1.070	0.261
TRL_7	348	5	0.620	0.131	-0.905	0.261
TRL_8	348	5	-0.387	0.131	-0.595	0.261
TRL_9	348	5	-0.423	0.131	-0.884	0.261
TRL_10	348	5	0.513	0.131	-0.955	0.261

Table 8: Descriptive Statistics (After Removing Outliers) (Continued)

Items	N	Maximum	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
TRL_11	348	5	-0.319	0.131	-1.027	0.261
TRL_12	348	5	-0.696	0.131	-0.279	0.261
LGO_1	348	5	-1.239	0.131	0.919	0.261
LGO_2	348	5	-1.282	0.131	0.669	0.261
LGO_3	348	5	-1.239	0.131	0.839	0.261
LGO_4	348	5	-1.226	0.131	0.183	0.261
LGO_5	348	5	-1.579	0.131	1.476	0.261
LGO_6	348	5	-1.114	0.131	0.424	0.261
PGO_1	348	5	-0.888	0.131	-0.032	0.261
PGO_2	348	5	-1.001	0.131	0.135	0.261
PGO_3	348	5	-1.103	0.131	0.356	0.261
PGO_4	348	5	-0.793	0.131	-0.379	0.261
PGO_5	348	5	-1.128	0.131	0.506	0.261
PGO_6	348	5	-1.021	0.131	0.546	0.261
PS_1	348	5	-0.878	0.131	0.501	0.261
PS_2	348	5	-1.207	0.131	1.161	0.261
PS_3	348	5	-0.533	0.131	-0.489	0.261
PS_4	348	5	-0.849	0.131	0.374	0.261
PS_5	348	5	-0.443	0.131	-0.622	0.261
PS_6	348	5	-0.010	0.131	-0.867	0.261
TRUST_1	348	5	-2.370	0.131	5.563	0.261
TRUST_2	348	5	-1.392	0.131	1.196	0.261
TRUST_3	348	5	-1.252	0.131	0.857	0.261
TRUST_4	348	5	-1.185	0.131	0.690	0.261



Table 8: Descriptive Statistics (After Removing Outliers) (Continued)

Items	N	Maximum	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
TRUST_5	348	5	-1.158	0.131	0.318	0.261
TRUST_6	348	5	-0.568	0.131	-0.373	0.261
TRUST_7	348	5	-0.948	0.131	0.075	0.261
TRUST_8	348	5	-0.941	0.131	0.133	0.261
TRUST_9	348	5	-1.156	0.131	0.785	0.261
TRUST_10	348	5	-1.015	0.131	0.348	0.261
TRUST_11	348	5	-1.183	0.131	0.554	0.261
TRUST_12	348	5	-1.004	0.131	0.249	0.261
OL_1	348	5	-0.655	0.131	0.028	0.261
OL_2	348	5	-0.861	0.131	0.252	0.261
OL_3	348	5	-0.766	0.131	0.225	0.261
OL_4	348	5	-1.289	0.131	1.953	0.261
OL_5	348	5	-0.612	0.131	-0.440	0.261
OL_6	348	5	-0.893	0.131	0.141	0.261
OL_7	348	5	-0.684	0.131	-0.056	0.261
OL_8	348	5	-0.509	0.131	-0.514	0.261
OL_9	348	5	-0.586	0.131	-0.356	0.261
OL_10	348	5	-0.675	0.131	0.147	0.261
OL_11	348	5	-0.590	0.131	-0.477	0.261
OL_12	348	5	-0.699	0.131	-0.135	0.261
OL_13	348	5	-0.742	0.131	-0.104	0.261
OL_14	348	5	-0.631	0.131	-0.253	0.261
OL_15	348	5	-1.010	0.131	0.615	0.261
OL_16	348	5	-0.898	0.131	0.183	0.261
Valid N (list wise)	348					

#### 4.2.4 Multicollinearity

The higher inter-correlations among independent (predicting) variables is known as multicollinearity. Generally, it is considered good if independent variables have strong correlation with dependent variables but not among themselves (Harvey, 2009). Multicollinearity issue can be diagnosing by evaluating two values, “Tolerance” and “VIF”. Tolerance indicates the variability of a particular independent not explained by other independent variables of the model. Ideally its value should not be less than 0.10. On the other hand, VIF is just inverse of tolerance and its value should not be greater than 10. Multicollinearity statistics for current study model are presented in Table 9. Tolerance values of all variables are greater than 0.10 and VIF values of all independent variables are less than 10 suggesting that no multicollinearity issue exist.

Table 9: Multicollinearity Statistics

	Collinearity Statistics	
	Tolerance	VIF
TF	0.339	2.947
TRL	0.871	1.147
LGO	0.643	1.554
PGO	0.662	1.510
PS	0.667	1.500
Tst	0.365	2.740

#### 4.3 Confirmatory Factor Analysis

After completing the data screening process, confirmatory factor analysis (CFA) was performed using structural equation modelling in AMOS 21. CFA is performed for analysing the fit of suggested measurement models. However,

exploratory factor analysis (EFA) is used for exploring the factor structure (Harvey, 2009). As the scales used in the present study had already been established and tested, CFA was conducted instead of EFA. All the measures used in the study showed good reliability and validity in past studies (Avolio & Bass, 1995; Cook & Wall, 1980; Bartram & Casimir, 2007; May et al., 2004; Edmondson, 1999b; Button et al., 1996; Jerez-Gomez & Valle-Cabrera, 2005). In the present study, CFA was conducted in two different phases. In first phase, the CFA was performed for one dependent and two independent variables whereas in the second phase the CFA was conducted for all mediating variables. Further, the reliabilities, convergent and discriminant validities of all scales were analysed.

The results of structural equation modelling (SEM) are interpreted in light of several fit indices. These are goodness-of-fit index (GFI), adjusted GFI, Tucker-Lewis index (TLI), chi-square, comparative fit index (CFI) and root mean square error of approximation (RMSEA). Schreiber et al. (2006) prescribed the four most important fit indices (Minimum discrepancy divided by its degree of freedom (CMIN/df), CFI, TLI and RMSEA) for interpreting the results of SEM. In the present study, I followed the recommendation of Schreiber et al. (2006) and analysed my results in light of the four above mentioned fit indices. Byrne (2010) offered the threshold values of these fit indices, which are given in Table 10.

Table 10: Fit Indices with their Threshold Values

Purpose	Name of Index	Threshold Value
Fit indices of CFA	Comparative Fit Index (CFI)	>0.95 great; >0.90 good
	Tucker-Lewis Index (TLI)	> 0.95 great; > 0.90 good
	Normalised-Chi square (CMIN/df)	< 2 great; < 3 good
Reliability	Root Mean Square Error of Approximation (RMSEA)	< 0.05 great < 0.08 good
	Composite Reliability (CR)	> 0.90 great, > 0.80 good, > 0.70 fair
Convergent validity	Average Variance Extracted (AVE)	AVE > 0.50 & CR > 0.50
Discriminant validity	Maximum Shared Squared Variance (MSV)	MSV < AVE
	Average Shared Squared Variance (ASV)	ASV < AVE

In addition to the fit indices, the procedure and threshold values to analyse the reliabilities, convergent and discriminant values proposed by Hair (2011) are also shown in Table 9. Validity is the extent to which a measurement scale measures what it supposed to measure (Harrington, 2009). Validity of the scale can be measured via two different methods: discriminant validity and convergent validity. Reliability measures the inter-item consistency of the instrument. Convergent validity refers to the extent to which the measurement scale items are inter-correlated and measures a similar concept. Conversely, discriminant validity measures the extent to which two constructs are different from each other.

### **4.3.1 CFA for Dependent and Independent Variables**

To confirm the measurement model of one dependent and two independent variables, a CFA model (Model 1) was performed. The model contains two independent variables including transformational leadership and transactional leadership and one dependent variable, organisational learning. The independent variable of transformational leadership consisted of fourteen indicators and transactional leadership contained twelve indicators. However, the indicators for dependent variable were sixteen. The output of initial CFA test (Model 1) showed weak model fit indices (see Table 11). The factor loading analysis showed that all items of transformational leadership and organisational learning had significant loadings on their respective constructs. However, out of twelve items of transactional leadership, only five showed significant loading on their relevant construct. After removing these seven items, the model fit indices were improved but not up to a standard level.

In the next step, the values of loadings were analysed by viewing standard regression weights of the items. According to Byrne (2010), the minimum value for factor loading should be 0.4; therefore, any value below this threshold limit should be removed. The standard regression weights showed no value less than 0.4, and thus no further item was removed. Finally, the modification indices were checked and found that several error terms had very high shared covariance with other error terms of the items of the same construct. For that reason, covariance was drawn among these error terms one by one. After drawing the required covariance's among error terms, the CFA model 2 was performed that showed acceptable model fit indices and

therefore a good fit to data. The detail of fit indices of both models and factor loadings are given in Table 11 and Table 12.

Table 11: Fit Indices of CFA Model of Dependent and Independent Variables

<b>Model</b>	<b>RMSEA</b>	<b>TLI</b>	<b>CFI</b>	<b>CMIN/df</b>
<b>Model 1:</b> Three factor model (TF, TRL, OL)	0.078	0.85	0.86	3.96
<b>Model 2:</b> Three factor model (TF, TRL, OL) After removing insignificant factor loadings and drawing covariance among error terms	0.066	0.91	0.92	2.70

Table 12: Factor Loadings of Dependent and Independent Variables

<b>Name of Indicator</b>	<b>Construct</b>	<b>Estimate</b>
OL_1	OL	0.636
OL_2	OL	0.772
OL_3	OL	0.780
OL_4	OL	0.617
OL_5	OL	0.749
OL_6	OL	0.581
OL_7	OL	0.746
OL_8	OL	0.771
OL_9	OL	0.823
OL_10	OL	0.768
OL_11	OL	0.661
OL_12	OL	0.831
OL_13	OL	0.779
OL_14	OL	0.804
OL_15	OL	0.797
OL_16	OL	0.627
TF_14	TF	0.782
TF_13	TF	0.844
TF_12	TF	0.856
TF_11	TF	0.747
TF_10	TF	0.819
TF_9	TF	0.832
TF_8	TF	0.863
TF_7	TF	0.875
TF_6	TF	0.866
TF_5	TF	0.872
TF_4	TF	0.818
TF_3	TF	0.740
TF_2	TF	0.818
TF_1	TF	0.735
TRL_12	TRL	0.782
TRL_9	TRL	0.408
TRL_8	TRL	0.625
TRL_3	TRL	0.640
TRL_1	TRL	0.831

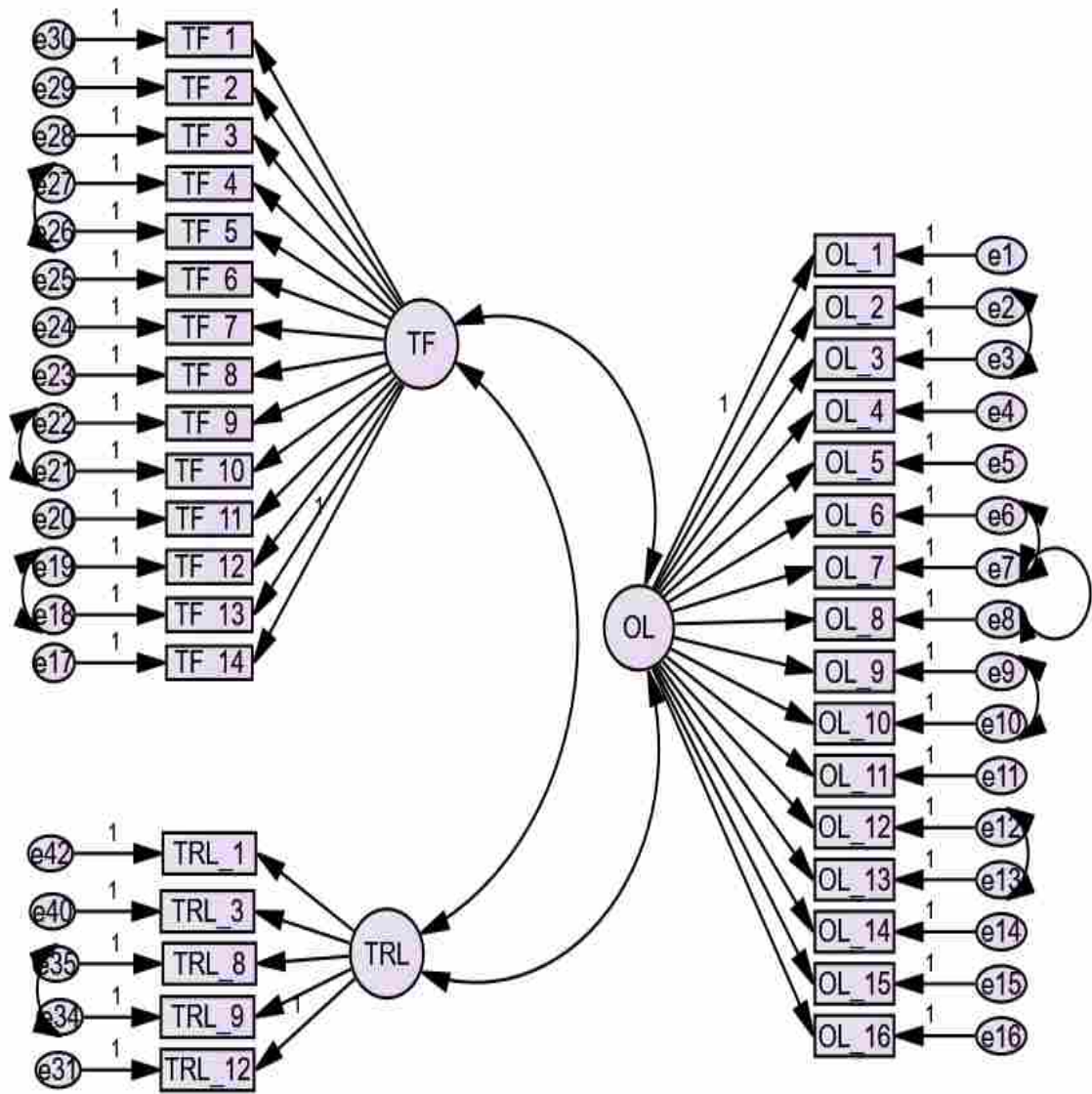


Figure 2: CFA Model of Dependent and Independent Variables

#### 4.3.1.1 Reliability and Validity of Dependent and Independent Variables

After completing the CFA model for both dependent and independent variables, reliability and validity of the constructs were calculated. The minimum threshold for composite reliability is 0.70; however, values greater than 0.70 are more favourable (DeVellis, 2016). In the present study, composite reliability was established for all dependent as well as independent variables ( $OL > 0.90$ ;  $TF > 0.90$ ;  $TRL = 0.80$ ). For establishing convergent validity, the AVE value of the construct



should be greater than 0.5. The AVE value for OL and TF were greater than 0.50 (Table 13), therefore convergent validity was established. However, the AVE value of TRL was just below 0.5 but not too low to cause a serious concern. Finally, discriminant validity of all constructs was established because the MSV values of all constructs were smaller than AVE (Hair, 2011), except for TRL. Therefore, the psychometric properties of these scales were well established in the present study.

Table 13: Reliability and Validity of Dependent and Independent Variables

	<b>CR</b>	<b>AVE</b>	<b>MSV</b>	<b>ASV</b>
<b>OL</b>	0.950	0.545	0.340	0.306
<b>TF</b>	0.966	0.673	0.672	0.509
<b>TRL</b>	0.798	0.454	0.677	0.475

#### 4.3.2 CFA of Mediating Variables

A third CFA model was performed to confirm the measurement model of four mediating variables (Trust in leaders, Psychological safety, Learning goal orientation and Performance goal orientation). The three constructs, Psychological safety, Learning goal orientation and Performance goal orientation were measured using six indicators each, whereas the construct of Trust in leaders contained twelve indicators. The output of the initial CFA (Model 3) showed poor fit to the data (Table 14). The analysis of factor loadings showed that all items had significant loadings on their relevant constructs. Further analysis of standard regression weights showed that no items had factor loadings below 0.5 and therefore all item were retained in the model. Finally, the review of modification indices showed that some of the error

terms shared high covariance. I drew covariance for these error terms and a Model 4 was conducted, which showed good fit to the data. A detail of fit indices for both Model 3 and Model 4 are given in Table 14.

Table 14: Fit Indices of CFA Model of Mediators

<b>Model</b>	<b>RMSEA</b>	<b>TLI</b>	<b>CFI</b>	<b>CMIN/df</b>
<b>Model 3:</b> Four factor model (LGO, PGO, PS, Trust)	0.080	0.82	0.81	3.83
<b>Model 4:</b> Four factor model (LGO, PGO, PS, Trust) After removing insignificant factor loadings and drawing covariance among error terms	0.065	0.90	0.91	2.80

The factor loadings of all items on their relevant construct are given in Table 15. It is noted that no indicator has a factor loading less than 0.4, which is the minimum threshold value.

Table 15: Factor Loadings of Mediators

<b>Name of Indicator</b>	<b>Construct</b>	<b>Estimate</b>
LGO_6	LGO	0.735
LGO_5	LGO	0.830
LGO_4	LGO	0.754
LGO_3	LGO	0.541
LGO_2	LGO	0.589
LGO_1	LGO	0.572
PGO_6	PGO	0.770
PGO_5	PGO	0.738
PGO_4	PGO	0.623
PGO_3	PGO	0.719
PGO_2	PGO	0.680
PGO_1	PGO	0.604
PS_1	PS	0.464
PS_2	PS	0.493
PS_3	PS	0.816
PS_4	PS	0.675
PS_5	PS	0.683
PS_6	PS	0.493
TRUST_11	Trust	0.669
TRUST_10	Trust	0.903
TRUST_9	Trust	0.910
TRUST_8	Trust	0.856
TRUST_7	Trust	0.758
TRUST_6	Trust	0.489
TRUST_5	Trust	0.823
TRUST_4	Trust	0.777
TRUST_3	Trust	0.747
TRUST_2	Trust	0.769
TRUST_12	Trust	0.893
TRUST_1	Trust	0.614

A graphical presentation of CFA (Model 4) is presented in Figure 3. All the indicators, error terms and covariance drawn among different constructs are presented.

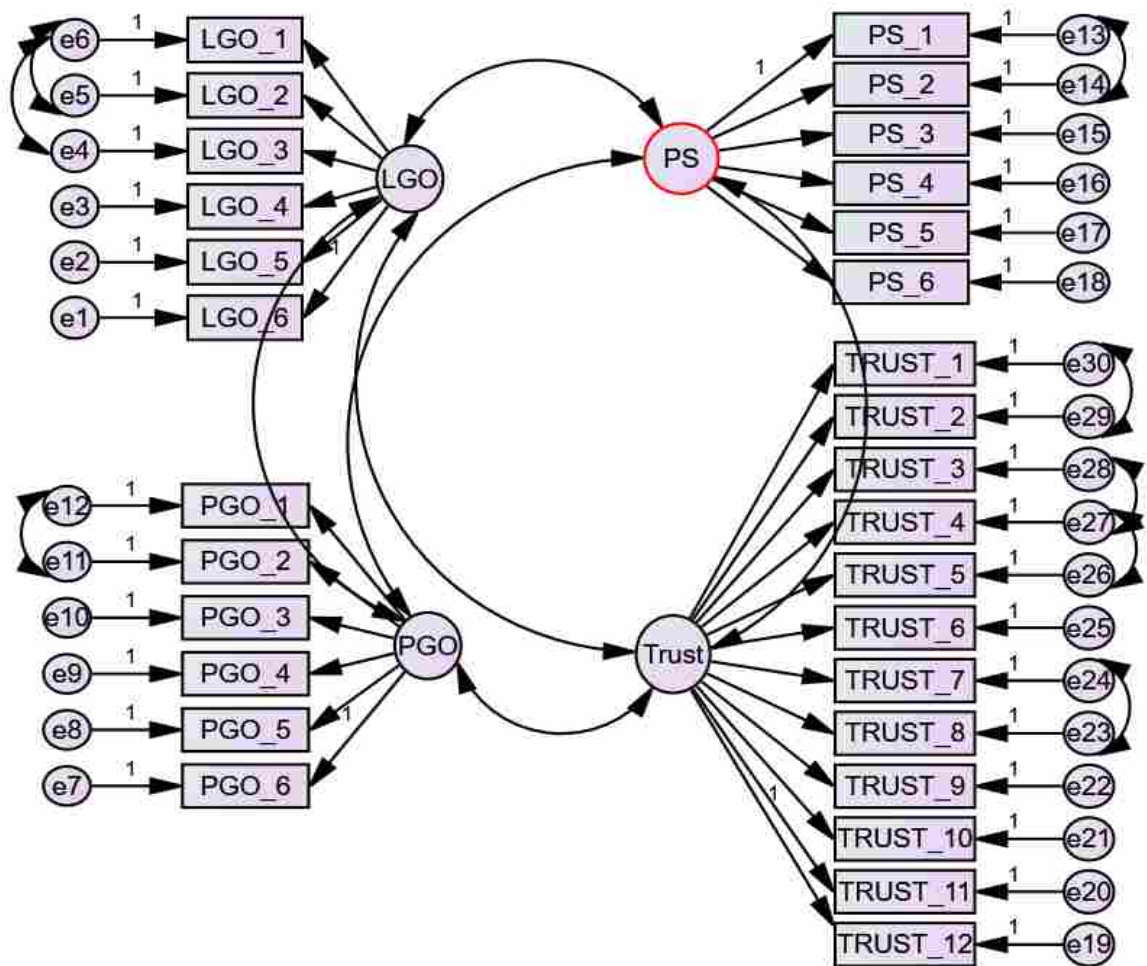


Figure 3: CFA for Mediating Variable

#### 4.3.2.1 Reliability and Validity of Mediators

After analysing the CFA model of all mediating variables, the validity and reliability of the constructs were calculated. The composite reliability, discriminant and convergent validity were tested and presented in Table 16.

Table 16: Reliability and Validity of Mediators

	<b>CR</b>	<b>AVE</b>	<b>MSV</b>	<b>ASV</b>
<b>LGO</b>	0.856	0.503	0.529	0.267
<b>TST</b>	0.944	0.591	0.402	0.223
<b>PS</b>	0.778	0.421	0.402	0.214
<b>PGO</b>	0.861	0.509	0.529	0.254

The composite reliability of constructs of all scales was greater than the minimum suggested value of 0.70 and thus all scales were reliable. The scales for LGO, TST and PGO showed excellent reliability ( $> 0.80$ ). To analyse the discriminant and convergent validities of the scales, values of AVE, MSV and ASV were calculated. The AVE values of all constructs except PS were greater than 0.50 and therefore convergent validity was established for these scales. To establish discriminant validity, the MSV and ASV values should be smaller than AVE (Hair, 2011). LGO and PGO had higher value of MSV than their AVE value. However, all constructs had smaller ASV values than their respective AVE values and established discriminant validity.

#### **4.4 Common Method Bias (CMB)**

CMB is related to the amount of variance caused by the measurement method rather than the measures of the study (Podsakoff et al., 2003). Researchers (e.g. Podsakoff et al., 2003) have suggested that in the case of already used questionnaire and cross-sectional research design, the researchers should analyse the impact of CMB on their data set. The presence of CMB may threaten the validity of the statistical results. To reduce the impact of CMB on the data set, the procedure of “anonymity” suggested by Podsakoff et al. (2003) was followed in the present study.

To achieve this purpose, a covering letter was attached to the questionnaire containing the necessary information about the study purpose. Further, respondents were not asked any information through which their responses could be traced back to them. According to Podsakoff et al. (2003), ensuring anonymity of respondents' responses can reduce the chances of CMB. Two statistical procedures, Harman's single factor and common latent factor were performed to analyse the impact of CMB.

#### **4.4.1 Harman's Single Factor**

Harman's single factor test explains that if there is a substantial amount of CMB present in the data then either a single factor will emerge while conducting EFA or one general factor will account for the major amount of covariance among the variables (Podsakoff et al., 2003). This study conducted EFA (principal component analysis, covariance matrix and varimax rotation) using SPSS 21. The results of EFA revealed seven different factors with eigenvalues greater than 1 (see Table 17), instead of a single factor. The seven factors explained a total of 60% of variance whereas the first factor did not account for the majority of variance explained (explaining only 33% variance). Results of the Harman's single factor test suggested that CMB was not a major concern in the study.

Table 17: Harman's Single Factor Test

<b>Component</b>	<b>% of Variance</b>	<b>Cumulative %</b>
1	32.25	32.25
2	11.00	43.26
3	6.49	49.75
4	3.67	53.43
5	3.27	56.71
6	2.72	59.07
7	2.37	61.29

#### **4.4.2 Common Latent Factor**

Common latent factor analysis was also conducted in CFA using AMOS 21. The combined CFA model was used for analysing the percentage of variance explained by a common latent factor. The common latent factor was connected with all observed variables by regression lines. The standardised regression weights were compared for both models, with and without common latent factor. The difference of two values showed that all values were smaller than the threshold value of 0.2 and therefore CMB was not a major concern in the data set.

#### **4.5 Descriptive Statistics and Correlations**

Descriptive statistical analyses provide important overview about the studied variables. The mean, standard deviation and correlation among all studied variables were calculated. It was observed from descriptive statistics analysis that only two correlations (LGO with TFL and TST with TFL) showed insignificant values while the remainder of the correlations among variables were significant, which shows initial support for the hypotheses. Further, the correlations of all variables with

dependent variable were significant. Table 18 provides detail about descriptive statistics of the studied variables.

The correlation analysis of control variables shows that only three control variables, gender, qualification and current experience, have significant correlation with three dependent variables, PGO, PS and OL. Qualification is significantly correlated with PGO and OL which shows that with the increase in employees' qualification level, their capacity to learn and performance goal orientation improves.



Table 18: Descriptive Statistics and Correlations

	Mean	SD	Gender	Age	Qualification	Current Exp.	Total Exp.	TFL	TRL	LGO	PGO	PS	TST
1. Gender	NA	NA	-										
2. Age	NA	NA	-0.159**										
3. Qualification	NA	NA	-0.100*	0.179**									
4. Current Exp.	NA	NA	-0.158**	0.611**	0.231**								
5. Total Exp.	NA	NA	-0.250**	0.744**	0.276**	0.787**							
6. TFL	4.04	0.87	-0.056	-0.058	-0.078	-0.089	-0.047						
7. TRL	3.09	0.79	-0.038	-0.107*	-0.154**	-0.051	-0.065	0.212**					
8. LGO	4.44	0.63	-0.012	0.029	-0.007	0.010	0.044	0.452**	0.093				
9. PGO	4.18	0.75	0.056	0.005	-0.129*	-0.106*	-0.083	0.368**	0.245**	0.606**			
10. PS	3.84	0.72	-0.111*	0.016	-0.066	-0.053	0.006	0.491**	0.244**	0.336**	0.286**		
11. TST	4.28	0.69	-0.062	0.021	-0.075	-0.038	0.033	0.759**	0.065	0.382**	0.291**	0.514**	
12. OL	3.97	0.95	-0.050	0.001	-0.111*	-0.094	0.000	0.549**	0.167**	0.351**	0.320**	0.562**	0.569**

$N = 390$ ; \* =  $p < 0.05$ ; \*\* =  $p < 0.01$

Further, employees' performance goal orientation also enhances with the increasing level of employees current experience. Gender is significantly correlated with Psychological safety. These three control variables are further incorporated in hypotheses testing.

#### 4.6 Hypotheses Testing

After completing data screening, preliminary data analysis and calculating reliabilities and validities of the scale, hypothesis testing was undertaken. All direct hypotheses were tested by SR modelling using AMOS 21 while mediation hypotheses were tested by Process Macro using SPSS.

##### 4.6.1 Structural Regression (SR) Models

SR models were conducted using AMOS version 21 for testing direct hypotheses (H1, H3, H4, H5, H6, H8, H9 and H11). In SR modelling, we draw all hypothesised relationships (see Figure 4). Before analysing the p-value for testing hypotheses, the goodness of fit of data was checked. The drawn model was analysed on the basis of four fit indices (CFI, TLI, CMIN/df and RMSEA). The result indicated a good fit to the data given in Table 19.

Table 19: Fit Indices of SR Model

<b>Model</b>	<b>RMSEA</b>	<b>TLI</b>	<b>CFI</b>	<b>CMIN/df</b>
<b>Model 1:</b> All constructs Structural Regression Model	0.053	0.90	0.91	2.06

Figure 4 represents SR modelling in which relationships among variable are drawn according to study hypotheses. All items showed good factor loading with their relevant factors. Items retained in the CFA model were assumed here.

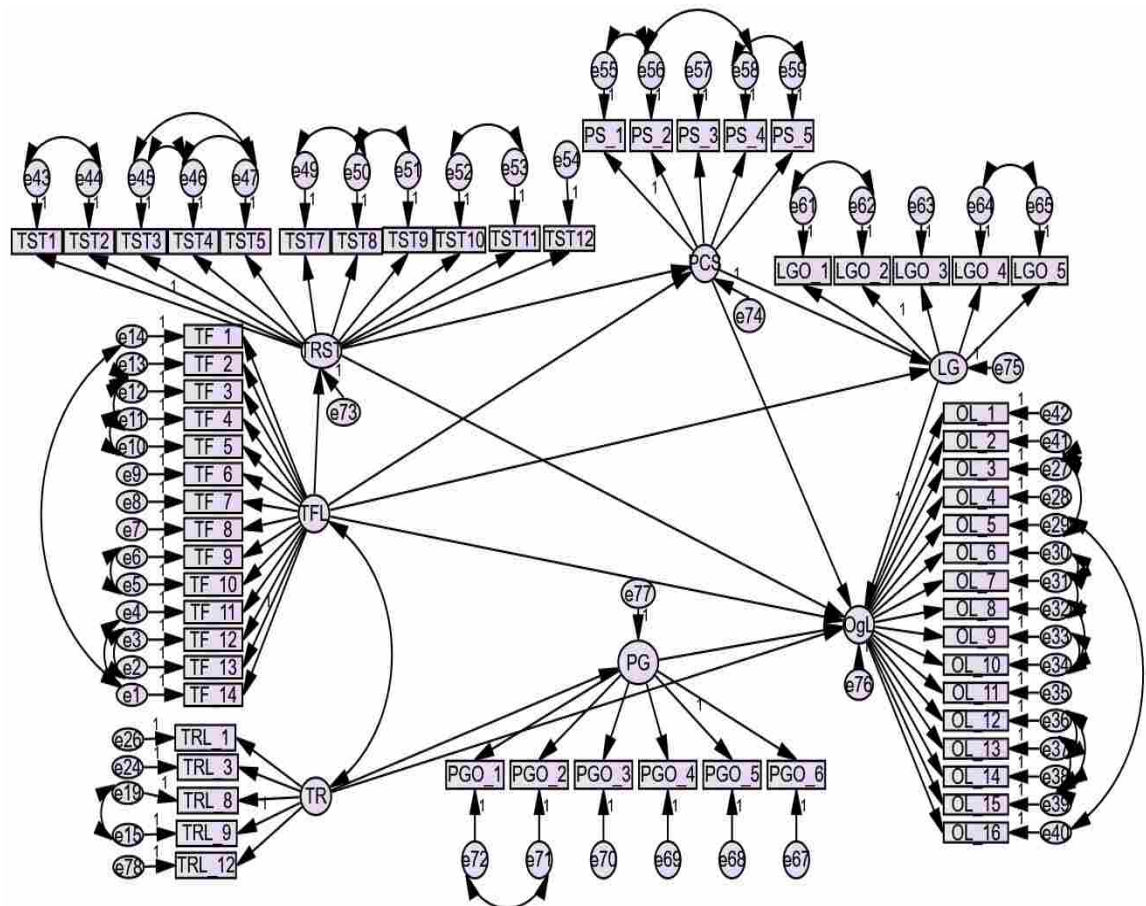


Figure 4: SR Model

The SR model includes only three control variables, gender, qualification and employees' current experience. Following Petersitzke (2009), only those control variables are included having significant correlation with dependent variables because including non-significant terms may impact the coefficient values of significant terms in final regression model. However, the SR model results show insignificant impact of gender ( $\beta = -0.001$ ,  $p=0.987$ ), qualification ( $\beta = -0.020$ ,

$p=0.464$ ) and employees' current experience ( $\beta = -0.026$ ,  $p=0.381$ ) on dependent variables.

#### **4.6.2 Direct Effect Hypotheses**

Hypothesis 1 and 9 are the linkages of independent variables transformational leadership and transactional leadership respectively with dependent variable, organizational learning. The results of SR model showed an insignificant impact of both independent variables on dependent variable ( $\beta = -0.044$ ,  $p = 0.604$ ;  $\beta = 0.017$ ,  $p = 0.876$ ) and thus rejecting hypothesis 1 and 9 (see Table 19). Hypothesis 3 of the study stated that Trust in the leader is positively associated with Psychological safety. The results of the analysis revealed an insignificant relationship between trust on the direct senior leader and psychological safety ( $\beta = 0.033$ ,  $p = 0.851$ ). The beta value showed that one unit change in trust on the direct senior leader could bring 33% change in psychological safety. The hypothesis 4 was supported by the data showing significant positive impact of psychological safety on organizational learning ( $\beta = 0.097$ ,  $p = 0.011$ ).

In hypothesis 5, the impact of independent variable, transformational leadership, was observed on psychological safety. The analysis of SR modelling results showed that transformational leadership significantly affects psychological safety ( $\beta = 0.404$ ,  $p = 0.000$ ) and thus support the hypothesis. The beta value shows that 40% variance in psychological safety occurs due to one unit change in transformational leadership. Impact of psychological safety on learning goals orientation was assessed in hypothesis 6. The standard estimates support this hypothesis and found significant positive impact of psychological safety on learning goals orientation ( $\beta = 0.086$ ,  $p = 0.015$ ).

Finally, the impacts of two mediating variables, learning goal orientation, and performance goal orientation on dependent variable, organizational learning are stated in hypotheses 8 and 11. The results of our data analysis support these hypotheses ( $\beta = 0.720$ ,  $p = 0.000$ ;  $\beta = 0.154$ ,  $p = 0.009$ ) and also gives initial support for our mediating hypotheses. A summary of all hypotheses along with their standard estimates and p-values are presented in Table 20.

Table 20: Testing Direct Hypotheses

Hypothesis	Independent Variable	Dependent Variable		Standardized Estimate	P	Hypotheses Decision
H1	TFL	→	OL	-0.044	0.604	Not supported
H3	TST	→	PS	-0.033	0.851	Not Supported
H4	PS	→	OL	0.097	0.011	Supported
H5	TFL	→	PS	0.404	0.000	Supported
H6	PS	→	LGO	0.086	0.015	Supported
H8	LGO	→	OL	0.720	0.000	Supported
H9	TRL	→	OL	0.017	0.876	Not Supported
H11	PGO	→	OL	0.154	0.009	Supported

#### 4.6.3 Mediation Hypotheses

Mediation hypotheses were tested using Process Macro by Hayes and Preacher (2014). There are three hypotheses (H2, H7 and H10) in the present study that involved mediation. The results of Process Macro models were analysed via class intervals. If lower level class interval (LLCI) and upper level class interval (ULCI) are in the same direction, the indirect effect is significant and vice versa.

Hypothesis 2 stated that “the effects of transformational leadership on organisational learning will be mediated by trust in the leader”. The Process Macro Model 4 was run to check the indirect effect of “transformational leadership” on “organisational learning” through “trust in leader”. The results of indirect effects were significant (Unstandardized beta = 0.262, S. E. = 0.049, LLCI = 0.166, ULCI = 0.361) and therefore supporting our hypothesis 2.

Hypothesis 7 stated that “the effect of transformational leadership on organisational learning will be mediated by learning goal orientation”. Again, Model 4 of Process Macro was run to test this hypothesis. The indirect effect of transformational leadership on organisational learning through learning goal orientation remained significant (Unstandardized beta = 0.040, S.E. = 0.018, LLCI = 0.006, ULCI = 0.077) showing the occurrence of mediation and therefore supporting Hypothesis 7. Further, Hypothesis 10 of the study states that “the effects of Transactional leadership on organisational learning will be mediated by performance goal orientation”. The results of Process Macro Model 4 support the mediating role of performance goal orientation between transactional leadership and organisational learning by showing significant level of significant (Unstandardized beta = 0.065, S.E. = 0.016, LLCI = 0.037, ULCI = 0.101). Thus, all hypotheses (H2, H7 and H10) that included mediating relationships were supported by the data. All models were run with 5, 000 bootstrap samples and 95% confidence intervals. Table 21 shows the details of Process Macro results.

Table 21: Indirect Effects of Process and Macro Models

Hypothesis	Independent Variable	Mediating Variable	Dependent Variable	Unstandardized Estimate	LLCI	ULCI	Hypotheses Decision
H2	TFL	→ TST	→ OL	0.262	0.1662	0.3615	Supported
H7	TFL	→ LGO	→ OL	0.040	0.0056	0.0771	Supported
H10	TRL	→ PGO	→ OL	0.064	0.0373	0.1015	Supported

From the results, it was observed that indirect effects of independent variables on dependent variable were significant without a significant direct effect. These results are in line with previous studies by (Hayes & Preacher, 2014). Hayes and Preacher (2014) argued that; it is possible for M to be causally between X and Y even if X and Y aren't associated. Similarly, Zhao et al. (2010) recommended that the requirement for a significant direct effect ( $X \rightarrow Y$ ) is not compulsory for testing mediation. Therefore, the insignificant direct effect of independent variables on dependent variable in the present study does not make the indirect effects invalid.

#### 4.7 Chapter Summary

In this chapter, the data collected using SPSS and AMOS software were analysed. In addition to presenting the computed results, a detailed interpretation of these results were also presented. In the first step, data screening and cleaning were performed by replacing missing values, analysing aberrant values and detecting outliers. Then, CFA was performed to check the fitness of data with the proposed model. After completing the preliminary analysis, sample characteristics and

descriptive statistical analysis were performed to obtain a clear picture about the participants of the study. Finally, the hypotheses were tested in two phases. Direct hypotheses were tested using SR model and mediation hypotheses were tested using PROCESS Macro. Summary of all hypotheses decision is presented at the end.



## **Chapter 5: Discussion and Conclusion**

### **5.1 Discussion of the Results**

This study examined the relationship between leadership styles and organisational learning in two types of leadership styles (transformational and transactional leadership) within the health care context in UAE. This context is considered a highly dynamic context taking into account that learning is a key for its revolution (Tucker et al., 2007). The study highlighted the important role of the two leadership styles on organisational learning under specific existence of some variables (goal orientation, trust in the leader and psychological safety). The concept of organisational learning has undertaken a wide range of academic investigations both conceptually and empirically. Garvin et al. (2008) indicated that organisational learning is a place where employees can explore new ideas, new approaches of implementing their processes and have open access to spread knowledge among different layers (individuals, teams and institution). Kostopoulos et al. (2013) supported how the knowledge can be created from one individual, then transferred between individuals through teams and become an integrated knowledge across the organisation. Individuals' experiments can be enrolled to be collective conditions that motivate organisations to become an organisational learning organisation (Chadwick & Raver, 2015). In the current study, organizational learning was measured based on the most widely definition used in the researches that organizational learning is a knowledge process, that includes, create knowledge, interpret it, integrate it through team networking and then share it at a larger layer at the organizational level (Jerez-Gomez and Valle-Cabrera, 2005).

Many studies have dealt with the leadership effect on organisational learning and revealed that leadership can promote organisational learning through their directions and continuous learning (Amagoh, 2009; Speechley, 2005). It has been indicated by Singh et al. (2010) that effective leaders are a dynamic tool to improve and maintain effective organisational learning. The present study selected the most common and recent types of leadership styles which are transformational and transactional leadership style, which are also more relevant to this study context dynamic nature (Noruzy et al., 2013; Hamstra et al., 2014).

The hypotheses were built to measure the employee's perspective toward their direct leaders and then its impact on organisational learning. Relevant factors were included in the framework as a causality relationship between the leadership and organisational learning (e.g. trust in the leader, psychological safety, learning goal orientation and performance goal orientation).

The results supported eight of the hypotheses and rejected three of them. The results indicated that there was no significant direct relationship between transformational leadership and organisational learning (H1). This finding contradicts with other studies findings where transformational leadership can lead to big transformational events and improve overall organisational learning as a consequence (Aragón-Correa et al., 2007). In addition, it is opposite to the findings of Noruzy et al. (2013) who found that, transformational leaders encouraged using existing knowledge and also discovered new knowledge and unique work approaches that supported the overall learning. Conversely, Vera and Crossan (2004) stated that transformational leadership can promote organisational learning on a specific term such as feedback forwarding (i.e., individual process of receiving the knowledge,

analysing it and then spreading it) and feedback learning (i.e., constant discussion of the issues and changing behaviour). This is why there were starting studies that shed light on the specific conditions of the indirect relationship between transformational leadership and organisational learning (Bryant, 2003). For this research; the cultural differences might be behind this contradiction in the findings. As for UAE culture and particularly SEHA working culture; the frequent changing in leadership and the confusion among individuals throughout this repeated changes might lead to weakness the direct effect of transformational leaders and in turns require to build other factors in between this relation (Trust in the leader, psychological safety and learning goal orientation).

The research outcomes revealed that transformational leadership can affect the organisational learning positively when there is trust in the leader (H2). This finding is highly proven by many other studies. Hollnthoner (2010) defined trust as a human/social concept that is essential to exist in organisations due to its dynamic nature and components. Trust was determined as a psychological relief and acceptance situation depending on the positive expectations of the other party (Hollnthoner, 2010; Rousseau et al., 1998). In reference to the link between trust in the leader and transformational leadership, previous studies have stated that transformational leadership consists of a lot of uncertainty and risk that in turn requires a relationship of trust to exist in the leader (Bass & Avolio, 1990). This is also argued by Tierney et al. (1999) that individuals can engage in a challengeable mission when they trust their leaders. Bezuijen et al. (2009) initiated leader member exchange relation theory that stated that trust is a vital element of the relationship between the successful leader and the individuals that enhance their commitment and learning activities. Thus, a transformational leader can create the climate of trust

among their individuals to increase their work engagements and increase their learning activities accordingly (Burke et al., 2007; Chen et al., 2014; Hannah & Lester, 2009).

The research hypothesis that proposed that trust was positively related to psychology safety was rejected (H3). This finding conflicted with relevant studies that agreed that psychology safety was created when individuals can express their views, disclose failures/mistakes and inquire about ambiguous issues without the fear of being harmed or obtaining negative consequences (Edmondson, 2004; Kahn, 1990). In addition, this was interfered with Li and Tan (2013) when they agreed that trust in the leader requires a condition of having a climate of psychological safety. Bradley et al. (2012) showed that, a climate of psychological safety required trust in the leader that encouraged individuals to outperform and increase their performance. This contradiction might be due to context nature and cultural differences. Throughout the recent ten years of this context; it has witnesses many changes at the leadership level in which it creates confusion among employees and weakness the safety climate on the overall context.

As a collective effort by many scholars, the research hypothesis of having a positive relation between psychological safety and organisational learning (H4) was supported by the analysis. This finding was a continuum result with Edmondson (1999b, 2004) when she stated that psychological safety enhanced the dynamic of organisational learning and increased learning engagements. Individuals can freely speak up and share work experiences and mistakes, which in turn improves overall organisational learning across layers (Leonard-Barton, 1995; Sitkin, 1992; Tucker &

Edmondson, 2003). Edmondson et al. (2004) agreed that a climate of psychological safety can guarantee sustainable organisational learning.

H5 was proposed to argue that transformational leadership was positively associated with psychological safety, which was supported by the analysis. This finding was similar to the study results by Avolio et al. (2004) when they agreed that a transformational leader can promote psychological safety through the inspiration and sense of trust translated into the relationship. Moreover, they stated that a transformational leadership consists of a high degree of empowerment that allows employees to be comfortable and increases their risk-taking assignments.

H6 was supported by the analysis (Psychological safety is positively associated with learning goal orientation). This finding agreed with Dweck and Leggett (1986) and with Chadwick and Raver (2015) when they identified learning goal oriented individuals who are dynamic and believe that their abilities and skills can be improved. Moreover, it is similar to the discussion of the psychological safety that encourages individuals to be involve in uncertain situations (Edmondson, 2004). Thus, when individuals feel that their opinions and views are being considered in a blame free environment, they will seek challenges and persist to adopt learning (Carmeli et al., 2009).

As trust was supported by the data analysis to mediate the relationship between transformational leadership and organisational learning, it was the same for learning goal orientation (H7). Based on “Achievement Goal Theory”, individuals have different goals related to their beliefs and abilities (e.g., Covington, 2000; Dweck, 1986; Pintrich et al., 2003). Heyman and Dweck (1992) introduced the “Motivational Model” that mentioned that individuals with learning goal orientations

believe that competencies are flexible and can be improved. In addition, it highlighted that individuals with a learning goal orientation enjoy obstacles and consider them a challenge to overcome and accomplish achievement. Moreover, the same model indicated that individuals can store experience in their mentalities and react to similar situations with the same tendencies of goal orientation. However, leaders can change the goal orientation of their team members toward a common goal orientation based on encounters and situations (Hannah & Lester, 2009). Many studies have found that transformational leadership encourages individuals to explore new approaches of performing assignments and engaging in challengeable missions and these are strongly related to the learning goal qualities (Aragón-Correa et al., 2007).

Relevant to learning goal orientation, it has been agreed that learning goal orientated individuals invest more effort in gaining new knowledge and discovering new ways of doing tasks in more creative ways and by more comfort methods (DeShon & Gillespie, 2005; Payne et al., 2007). Chen and Mathieu (2008) agreed that the contextual factors of the organisation can enforce employees to learn new skills and engage in brand new projects that by default increases learning activities. This means that sometimes organisational situations might indirectly drive the goal orientation of its individuals to be a learning goal, which in turn enhances the overall organisational learning (Chen, 2005; Thoresen et al., 2004). These arguments were similar to these research findings that learning goal orientation is positively associated with organisational learning (H8).

Transactional leadership was hypothesised to positively associate with organisational learning (H9). However, the data analysis results did not support this

hypothesis. Previous related studies identified a transactional leader as being the type of leader who applies standards and rules, and who is keen in setting clear objectives and applies a reward/punishment system on the achieved targets (Bass & Avolio, 2000). The research findings contradicts with other studies by Bass and Avolio (1993) and Howell and Avolio (1993) who agreed that transactional leaders lead to enhance their individual's engagements and increase their responsibilities, which in turn improves overall organisational learning activities and performance. Similarly, Vera and Crossan (2004) agreed that transactional leadership can promote organisational learning through their individual's compliance of organisation procedures as well as modifications and changing of the existing policies that creates learning opportunities. For the present study, context and cultural differences might be behind this contradiction. As for SEHA context; the nature of centralization of processes and lack of empowerment might affect the direct effect of transactional leadership. Moreover; the frequent change of leadership and lack of awareness of the overall objectives lead to break the direct relation.

Research findings accepted the hypothesis that said that the effect of transactional leadership on organisational learning will be mediated by performance goal orientation (H10). This result is highly supported in previous related study from the same field. Performance goal was identified as the other type of goal orientation by Dweck and Leggett (1988) when they explained the performance goal orientated individuals as the ones who believe that their skills and abilities are rigid and fixed. These types of individuals tend to avoid engaging in any high-risk activity to protect their reputation and image. However, they tend to engage in a routine task to reflect their good picture. Elliot (2005) stated that performance goal oriented individuals tend to show an outstanding performance, because they are comparing themselves to

others and would like to outperform. As discussed earlier, leadership can change the goal orientation of its individuals based on the context requirements (Darnon et al., 2006). In addition, there is a positive relationship between transactional leadership and performance goal orientation due to their nature and attributes (Cellar et al., 2011; Hulleman et al., 2010; Janssen & Van Yperen, 2004, Judge & Piccolo, 2004; Payne et al., 2007).

As per Pintrich (2000) in his comparison between the two types of the goal orientation, both types enhance learning but to a different degree. For learning goal individuals who do not care about any negative consequences they tend to engage in new projects using a standard of personal development and deep analysis of the task. However, performance goal individuals concentrate on becoming better than others and being smarter compared to others; however, they will avoid engaging in the task if it is uncertain and entails any negative results. This is why H11 argued that; performance goal orientation is positively associated with organizational learning and it was supported by the research data analysis. However; as discussed earlier and relevant to previous studies; the strength of the relation between performance goal orientation and organizational learning is less effective compared to the strength of the relation between learning goal orientation and organizational learning (e.g., Elliot, 1999; Kaplan & Maehr, 2007) and this is also supported in this research findings.

Taking the identified results into consideration, this chapter further explores the implications of managerial and research practices, limitations and the direction of future research.



## 5.2 Reasons for Non-Significant Findings

Due to the non-significant relationship between three of the hypotheses (H1, H3 and H9), three interviews were conducted with a senior level positions to discuss the non-findings and related cultural differences. The CEO (Chief Executive Officer) of Tawam and Al Ain Hospitals was interviewed and the research model was explained at the first place. Then, hypotheses and the findings of the data analysis were discussed too. Having more than twenty years of experience, he stated that transformational leadership is near to the hospital working culture (Abu Dhabi Health Service Company culture) and it is unlimited by time. In addition, the inspirational message from the transformational leader is very important to clarify the organisational mission and objectives, which leads to increased employees' engagement rates. Organisational learning at Al Ain and Tawam Hospitals depends on knowledge transfer between team members. For instance, Byanati system is an information technology system that was created based on the senior management's vision to increase revenue and decrease the denial rate. The stakeholders' team consisted of finance and revenue cycle members, medical affairs and IT. The concept behind this multi-disciplinary team was to come up with an innovative tool to measure the physician's productivity, their revenue and denials. In his opinion, this is what he called "organisational learning" where the team members worked towards reducing the denial rate and increasing the revenue rate. The physicians started to raise their issues and challenges, then the finance and revenue presented the last year financial performance and finally IT came up with a system design that serves all parties requirements. Taking into account that the message was clear (i.e. there will be no harm assigned over any physician), it was for improvement purposes and he

mentioned that; this was the psychological safety atmosphere that allowed physicians to discuss their issues such as the unambiguity of some of the related system issues and other training issues. The CEO added that communication between team members was very important to build a psychological safety climate. He also mentioned that transformational leadership existed mostly at the top management level and overall organisational level to inspire the mission and objectives to the departmental chairs. Moreover, he stated that the gain from transformational leadership is higher and unlimited with time as continuous outcomes are added.

In contrast, transactional leadership succeeded more at the level of departments and section heads. For example, when the manager provides the employees with a specific budget to achieve a denial rate of 4% by the end of quarter two of 2018, here different needs will be allocated based on the budget. The IT might need enhancements for the current Oracle system, finance might need to hire more coders and physicians might require more training. This is task oriented, i.e. at the end of quarter two 2018 the outcome will be delivered; however, the real gain is not weighted. In other words, for example, the physicians were trained but you do not know whether the organisation benefited or not. He also added that from his experience several factors influence organisational learning such as change of management, budget constraints and leader awareness of the organisation headings and upcoming directions.

Finally, the CEO provided recommendations based upon our discussion. First, to have a transformational environment that is not limited by time, with better communication that everyone knows about that will allow unlimited innovation. Second, the knowledge transfers not to be restricted by policy and to be accessible

between departments so that any employee can obtain information and learn about other departments' tasks and processes. Finally, he recommended sharing the mission, objectives and outcomes with employees periodically to be all going in the same direction.

Patient Access Manager at Tawam Hospital was the second interviewee. Through her twenty years' experience, she thinks that the rapid change in the management and direction across the business entities under SEHA was the main reason behind the non-significant relationship between transformational and transactional leadership and organisational learning. In addition, she added that Tawam culture affects the research causal framework. She mentioned that; rapid changes of leadership cause absence of transparency, role ambiguity, unclear vision and creates fear for employees. Such changes lead to the spread of rumours that destroy the psychological safety and trust in the leaders. Moreover, employees will lose the trust of their direct leader that their leader will not be able to fight for their rights and they will lose the relationship of trust as an outcome. That is why transformational leadership was missing at Tawam and might be the same for other business entities under SEHA as per her opinion. For transactional leadership, she mentioned that Tawam culture is not work oriented due to the fast changes in management and loss of trust in the leader and favouritism in terms of promotions and compensations. That was why she thinks that transactional leadership has no direct relation with organisational learning. It needs to build a dependable system, trust with employees and be transparent with employees.

Finally, she provided some recommendations to improve this causal effect of the two types of leadership on organisational learning. First was to convert the

organisational culture to be more transparent and to enhance the trust relationship in the leader via regular meetings with the end users, consider their situations and needs and to be fair with them in terms of pay, recognition and developments. Second, inspire the employees about the organisational directions by showing them the past with the future, i.e., expressing the challenges associated in the past and what is expected to occur in the future. After that, to allow individuals to participate in decision-making processes and collectively undertake the action plans to overcome the expected challenges. Third, to customise the training courses with the organisational and individual's needs. For example, initiate a program for the managers to qualify them to be fit for their position and to be fit for leading their followers. In addition, enhance the probation program for new hiring managers to also assess their abilities in leading and develop them accordingly if required. Fourth, she suggested to apply a "Pay Per Perform" system to compensate the employees based on their achievements. This system would allow rebuilding of the relationship of trust in the leader and enhance the learning and performance. In addition, initiate the "Employee of the month" across all departments to allow the individuals to be recognised publically in official ceremonies. In this way she thinks that the employees' competition would be greater and would lead to increases in their learning, engagement and performance.

From another point of view, a "Senior Program Analyst" stated that there were differences due to the cultural effect. During her past eleven years at Tawam hospital she saw the transactional leadership style was the steering style in her working area and she thinks it is the same for other departments. There is a high self-ego culture among the employees. The employees always try to prove that they have capabilities better than their manager or leader. This is a fact in our culture, she said,

and this is the reason behind the absence of the direct relationship between transformational and transactional leadership and organisational learning.

She added that; transformational leaders always have challenges to build the intermediate factors to affect the organisational learning (i.e., trust in the leader, psychological safety and learning goal orientation) in this context. She sees that transformational leadership requires high support from the organisation. Managers need to have more authority to reward their employees, not necessarily by money, but through at least leave and permissions. For example, when the employees work more than their assigned working hours to cover any sudden shortage in other sections, the manager cannot permit the employee to take a short leave the next day or take leave without deducting from the employee's annual leave record. In addition, the manager cannot give any overtime without HR approval. Therefore, these limitations result in breaking the direct relationship between transformational and transactional leadership.

She thinks that employees at Tawam and SEHA overall work only for their appraisals and not for the mission and vision of the organisation. She sees that the organisation has a big role in emphasising the motivation for their leaders, so that this motivation can be transited to their followers. Currently, there are a lot of workshops running every year for the senior level to show SEHA's vision and missions; however, there is no action plan requested from every manager to implement the mission and vision. In her opinion, managers and leaders need to sit with their followers at the beginning of every year to set a plan and objectives with their employees and then provide a space of two or more objectives to be decided by

the employee to accomplish by the end of the year. In this way, she thinks the employee would be more engaged, more creative and learning would be enhanced.

As a recommendation, she suggested to empower the managers to reward their employees directly without HR (Human Resource) approval toward their work, because they know their employees' efforts and they can at least compensate them through leave and permissions whenever applicable as a direct reward. She also suggested having more transparency in implementing the policy. For example, for the last three years the external training courses were stopped due to budget limitations as mentioned by HR and senior management. However, one of the senior managers or a well-known staff member was away on an external course. This confusion causes a climate of frustration and non-trust and leads to cutting the relation between leaders and employees. The last suggestion was that managers should be aware of their employees' tasks and processes and should be engaging in their missions and daily operations. By this approach, they will build a trust with their employees and they will be a role model, which will increase their employees learning and performance.

### **5.3 Theoretical Implications**

Organizational learning concept has been frequently criticized as different conceptualizations not been integrated rather they are scattered across different fields and contexts (Belle, 2016 & Gorli et al., 2015). This research identified three literatures gaps, the first gap is that previous studies emphasized on individual learning rather than the learning of organizations (Sung & Choi, 2014). Due to the inconsistency and variations in identifying organizational learning measurements, the second gap is that there is a need to increase the number of empirical studies to

validate the model of organizational learning (Allen et al., 2015; Easterby-Smith & Cunliffe, 2017). Relatively; the third gap is that lack of the identifications of the underlying mechanisms or processes that describes how individual learning can turn into organizational learning (Gorli et al., 2015 & Bui et al., 2016).

The current study findings had filled the aforementioned literatures' gaps through providing one of the few models which incorporates both individual and organizational level factors in a single model. The second contribution is that; this study eexamined the relationship between the selected leadership styles and organizational learning in U.A.E health care organizations. Third one is that; it explored the mediating effects of trust in the leader and goal orientation between the selected types of leadership and organizational learning.

#### **5.4 Managerial Implications**

The present findings introduces several implications for practitioners. Previous studies showed segregation of individual learning and organizational learning (Yukl, 2006; Lipshitz et al., 2002; Sung & Choi, 2014) . Due to the unique nature and specifications of this study context and lack of empirical investigations in health care field (Edmondson et al., 2016), this study analysis provides a single model of organizational learning that incorporates individual processes with organizational level in the UAE health care context. From a practical and managerial point view, to enhance organizational learning, further attention should be given to the organizational culture, leaders and managers skills and competencies, and individual differences.

As the study analysis showed that the transformational leadership can enhance organizational learning through enhance their trust relation with followers (Javed et al., 2018). This is can be improved through transparency and involve employees in the decision making process and keep them updated about the current situation and future direction. Holding regular meeting with the individuals, listening to their concerns and considering their differences would enhance their trust relation and motivate them to exceed expectations.

The current study also indicates that transformational leader promotes the followers toward learning goal orientation direction which in turns increases individuals learning participation and overall organizational learning and this is a support for previous studies (e.g., Darnon et al., 2009). Also it have been stated, that transformational leaders shape their follower's values to be participative beyond their job descriptions through fairness, respect and tolerance of individuals differences (Northouse, 2016). Therefore; leaders are encouraged to engage with their individuals in implementing the assignments, pioneer in applying new strategies and tasks and direct them toward common values and objectives, in order to enhance their learning goal orientation direction.

Moreover; this study indicated that psychological safety climate is having a positive association with organizational learning and this is also a support for similar studies (Payne, 2007 & Park, 2010). Policy makers are recommended to initiate a clear policy to protect employees' rights, which would provide a climate of Psychological safety. Mangers and leaders are recommended to give frequent, accurate, specific and timely feedback to all employees to state an overall



psychological safety climate with an effective communication channels to enhance trust relation too.

To enhance the role of transformational leadership (individualized consideration); the leaders should consider their employees differences and needs in which to build a relation of trust that promotes organizational learning; for example; career development plan. Also; to motivate the individuals to improve their competences; policy makers needs to support the individuals to get higher qualifications through study leaves and financial support; in order to strengthen the mediating impact of learning goal orientation between transformational leadership and organizational learning. Moreover; to enhance the role of transformational leadership (intellectual stimulation) through learning goal orientation, leaders are recommended to remove some controls, allow for further autonomy, but retain accountability. Allowing individuals to participate in decision-making processes would inspire the employees to think in new ways in which it strengths the transformational leadership role through learning goal orientation. In addition; inspiring individuals about the future directions with sharing the past achievements and challenges would enhance the role of transformational leadership (Charismatic leader) through direct the individuals toward learning goal orientation.

The present study analysis demonstrates that transactional leaders can encourage their employees toward learning activities through promoting them toward performance goal orientation directions. Individuals with goal orientation can outperform and increases their learning gains through working with a transactional leader who shapes a culture of competitiveness aligned with recognition and reward system (McCleskey, 2014). Leaders and managers should review their follower's

performance objectives, clarify their roles and assign rewards upon their outcomes (Breevaart et al., 2014). Policy makers are recommended to initiate “pay per perform” policy and system to compensate the employees based on their achievements, in order to enhance the performance goal orientation impact between the employees and enhance the role of transactional leadership as a return. Moreover; policy makers are encouraged to initiate owners for the existing policies for any update or change of the workflows/conditions, in order to enhance the role of transactional leader. To strengthen the indirect impact of transactional leadership through performance goal orientation, management by Objectives (MBO) will allow for further job enhancement and thereby overall organizational learning. At the same aspect; HR managers are encouraged to use creative rewarding tools, with an effective balance between financial and non-financial tools, in order to enhance the role of transactional leadership through performance goal and contingent reward. In line with that; rewarding individual performance and team based performance are recommended to enhance organizational learning. Policy makers are recommended to initiate “team member’s policy” for any project/initiative task force, to ensure knowledge sharing between the team members and strengthen the transactional leader role through the impact of performance goal orientation. Moreover; to increase the competition between the employees in which it promotes goal orientated individuals to outperform, policy makers and HR are recommended to initiate a policy for “employees recognition system” that indicates the organizational and departmental objectives; the eligibility conditions and the process rewarding through this system. This type of policy will motivate individuals to be within the eligible terms in order to be recognized through the higher level of the management. Moreover; this policy and system will enhance the role of performance goal

orientated employees and transactional leadership on organizational learning. From another point; the leadership is recommended to allow a space for their individuals to put their performance objectives based on their capabilities and preference aligned with some kind of nominal rewards for meeting expectations and in the reverse case the reward would be higher; in this way; the individuals would be more encouraged to accomplish their objectives as well as might outperform to gain the higher reward. Finally; HR and senior management are recommended to arrange training programs for their leaders and managers in order to improve their competencies to maintain the required qualities of being transformational and transactional leader based on the situation.

### **5.5 Limitations and Future Directions**

The study in general is one of the few examples of relevant research in the UAE. It introduces one of only a few or perhaps the first empirical framework that examines the relationship between transformational and transactional leadership styles and organisational learning. This research can be taken as the baseline for future research to validate this framework on other industries in UAE context and also add other factors and antecedents of organizational learning that have not been examined in this study.

Moreover, a customized study is recommended for each sector, which takes account of their organizational culture. For instance, a study might target private sector employees alone or those who are working in the financial, medical or educational sectors, since these are the major sectors targeted by the UAE government.

Although a number of antecedents are defined by organizational learning theories and models, each culture is unique and hence many of the defined antecedents may have different implications in the context of different cultures; this means that examining the identified antecedents of this study in context of other cultures is to be recommended. Further analysis would also be useful for comparing cultures, in order to examine the impact of leadership styles differences on each culture.

Cross sectional and self-reporting is the major limitation of the present study, similar to other studies in the field (Chen et al., 2014 & Bradley et al., 2012). The questions developed to measure the leadership impact on organisational learning were from the employees' perspectives. This might be subjected to personal views and not reflecting the reality. In addition, the study was applied in a health care context; thus, the results cannot be generalised. Future studies over diverse contexts are recommended for cross-validation purposes.

The conclusion of this study cannot be circulated to overall health care entities, as this is not a longitudinal study over time (Boerner et al., 2007). Therefore, the causal effect between the constructs and organisational learning might provide different effects during time passage and organizational changes. On the other hand; other health care entities at other regions/Emirates like Abu Dhabi or Dubai might be an option for future research. Future longitudinal studies combining quantitative with qualitative methodologies would strengthen the outcomes of this study (Higgins et al., 2012). Adding to that, the cross-sectional method of this study would not allow generalising the outcomes causality relationships. Hence, a longitudinal study over an extended time would be more suggestive regarding the effect of independent

variables as well as the mediator's impact on the dependent variable (Boerner et al., 2007).

Finally, although the present research has used instruments/measures that have been employed in different cultures, researchers commonly complain about the lack of generally acceptable instruments (Colquitt et al., 2007; Dirks & Ferrin, 2001, 2002). For instance organizational learning and leadership styles may have different implications in the context of the UAE culture. While the current study may be considered an early step in the research on the selected leadership styles and organizational learning in non-Western nations, as far as we understand, no UAE-based defined scale for any of the selected constructs has been developed for the purposes of measurement and evaluation in the UAE culture.

## **5.6 Summary**

To conclude, organizational learning is an investment by both parties; the individual and the organization. This relationship is perhaps becoming increasingly complicated for both, but leaders, managers and HR professionals need to understand that there is no "one best" structure suitable for every context, since each organization is unique, with its own culture and needs, not to mention the unique of individual employees. Moreover, for organizational learning to improve, much time is needed before any adopted practices or strategy yield the required benefits and reveal their implications. Human behavior is so complicated that organizations need to take the time element into consideration and take longer to reflect.

## References

- Abu Dhabi Economic Vision 2030. Retrieved from <http://www.goverbmnet.ae>
- Ahearne, M., Mathieu, J., & Rapp, A. (2005). To empower or not to empower your sales force? An empirical examination of the influence of leadership empowerment behaviour on customer satisfaction and performance. *Journal of Applied Psychology*, 90, 945-955.
- Alegre, J., & Chiva, R. (2008). Assessing the impact of organizational learning capability on product innovation performance: An empirical test. *Technovation*, 28, 315-326.
- Alexander, L., & Van Knippenberg, D. (2014). Teams in pursuit of radical innovation: A goal orientation perspective. *Academy of Management Review*, 39(4), 423-438.
- Allen, R. W., Porter, L. W., & Angle, H. L. (2015). *Organizational Dynamics and Intervention: Tools for Changing the Workplace: Tools for Changing the Workplace*. Routledge.
- Al-Mailam, F. F. (2004). Transactional versus transformational style of leadership – Employee perception of leadership efficacy in public and private hospitals in Kuwait. *Quality Management in Health Care*, 13(4), 278-284.
- Amabile, T. M. (1996). *Creativity in context*. Boulder, CO: Westview.
- Amabile, T. M. (1998). How to kill creativity. *Harvard Business Review*, 76, 77-87.
- Amabile, T. M., Conti, R., Coon, H., Lazenby, J., & Herron, M. (1996). Assessing the work environment for creativity. *Academy of Management Journal*, 39, 1154-84.
- Amagoh, F. (2009). Leadership development and leadership effectiveness. *Management Decision*, 47(6), 989-99.
- Ames, C., & Archer, J. (1987). Mother's beliefs about the role of ability and effort in school learning. *Journal of Educational Psychology*, 79, 409-414.
- Ancona, D. (1990). Outward bound: Strategies for team survival in the organization. *Academy of Management Journal*, 33, 334-365.
- Ancona, D. G., & Caldwell, D. F. (1992). Bridging the boundary: External activity and performance in organizational teams. *Administrative Science Quarterly*, 37, 634-655.
- Anderson, S. E., & Williams, L. J. (1996). Interpersonal, job, and individual factors related to helping processes at work. *Journal of Applied Psychology*, 81(3), 282-296.

- Annual Economic Report 2016. Retrieved from: <http://www.economy.gov.ae>
- Antonakis, J., Avolio, B. J., & Sivasubramaniam, N. (2003). Context and leadership: An examination of the nine-factor full-range leadership theory using the Multifactor Leadership Questionnaire. *The Leadership Quarterly*, 14(3), 261-295.
- Aragón-Correa, J. A., García-Morales, V. J., & Cordon-Pozo, E. (2007) Leadership and organizational learning's role on innovation and performance: lessons from Spain. *Industrial Marketing Management*, 36(3), 349-359.
- Argote, L., & Miron-Spektor, E. (2011). Organizational learning: From experience to knowledge. *Organization Science*, 22, 1123-1137.
- Argyris, C. (1955). Some characteristics of successful executives. *Personnel Journal*, June: 50-63.
- Argyris, C. (1964). *Integrating the individual and the organization*. New York, NY: Wiley.
- Argyris, C., & Schon, D. A. (1996). *Organizational learning II: Theory, methods, and practice*. Reading, MA: Addison-Wesley.
- Arnold, J. A., Arad, S., Rhoades, J. A., & Drasgow, F. (2000). The empowering leadership questionnaire: The construction and validation of a new scale for measuring leader behaviours. *Journal of Organizational Behaviour*, 21, 249-269.
- Atwater, L. E., & Waldman, D. A. (2008). *Leadership, feedback, and the open communication gap*. Taylor & Francis.
- Avery, D. R., McKay, P. F., & Wilson, D. C. (2007). Engaging the aging workforce: the relationship between perceived age similarity, satisfaction with coworkers, and employee engagement. *Journal of Applied Psychology*, 92(6), 1542.
- Avolio, B. J. (1999). *Full leadership development: Building the vital forces in organizations*. Thousand Oaks, CA: Sage.
- Avolio, B. J., & Bass, B. M. (1995). Individual consideration viewed at multiple levels of analysis: a multi-level framework for examining the diffusion of transformational leadership. *Leadership Quarterly*, 6, 199.
- Avolio, B. J., & Gardner, W. L. (2005). Authentic leadership development: Getting to the root of positive forms of leadership. *The Leadership Quarterly*, 16(3), 315-338.
- Avolio, B. J., 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 Behaviour*, 25(8), 951-968.

- Baer, M., & Frese, M. (2003). Innovation is not enough: Climates for initiative and psychological safety, process innovations, and firm performance. *Journal of Organizational Behaviour*, 24(1), 45-68.
- Bahlmann, T. (1990). The learning organization in a turbulent environment. *European Journal of Management Research*, 9(4), 167-82.
- Bartram, T., & Casimir, G. (2007). The relationship between leadership and follower in-role performance and satisfaction with the leader: the mediating effects of empowerment and trust in the leader. *Leadership & Organization Development Journal*, 28(1), 4-19.
- Bass, B. M. (1985). *Leadership and performance beyond expectations*. Collier Macmillan.
- Bass, B. M. (1998). *Transformational leadership: Industry, military, and educational impact*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Bass, B. M. (1999). Two decades of research and development in transformational leadership. *European Journal of Work and Organizational Psychology*, 8(1), 9-32.
- Bass, B. M., & Avolio, B. J. (1990). The implications of transformational and transactional leadership team, and organizational development. In R. Woodman & W. Passmore (Eds.), *Research in organizational change* (pp. 231-272). Greenwich, Conn: JAI Press.
- Bass, B. M., & Avolio, B. J. (1993). Transformational leadership: A response to critiques. In M. M. Chemers & R. Ayman (Eds.), *Leadership theory and research: Perspectives and directions* (pp. 49-80). New York: Academic Press.
- Bass, B. M., & Avolio, B. J. (2000). *MLQ multifactor leadership questionnaire technical report*. Thousand Oaks: Sage Publications
- Bass, B. M., & Riggio, R. E. (2006). *Transformational leadership*. Mahwah, NJ: Lawrence Erlbaum.
- Bass, B. M., Avolio, B. J., & Goodheim, L. (1987). Biography and the assessment of transformational leadership at the world class level. *Journal of Management*, 13, 7-19.
- Bass, B. M., Avolio, B. J., Jung, D. I., & Berson, Y. (2003). Predicting unit performance by assessing transformational and transactional leadership. *Journal of Applied Psychology*, 88(2), 207-218.
- Belle, S. (2016). Organizational learning? Look again. *The Learning Organization*, 23(5), 332-341.



- Berson, Y., Nemanich, L. A., Waldman, D. A., Galvin, B. M., & Keller, R. T. (2006). Leadership and organizational learning: A multiple levels perspective. *The Leadership Quarterly*, 17(6), 577-594.
- Bezuijen, X. M., Van Den Berg, P. T., Van Dam, K., & Thierry, H. (2009). Pygmalion and employee learning: The role of leader behaviours. *Journal of Management*, 35, 1248-1267.
- Bijlsma-Frankema, K., Rosendaal, B., & Taminiau, Y. (2006). Acting on frictions: learning blocks and flows in knowledge intensive organizations. *Journal of European Industrial Training*, 30(4), 291-309.
- Blomqvist, K., & Ståhle, P. (2000, September). Building organizational trust. In 16th Annual IMP Conference, Bath, UK (pp. 7-9).
- Boerner, S., Eisenbeiss, S. A., & Griesser, D. (2007). Follower behaviour and organizational performance: The impact of transformational leaders. *Journal of Leadership & Organizational Studies*, 13(3), 15-26.
- Boisot, M. H. (1998). *Knowledge assets: Securing competitive advantage in the information economy*. New York: Oxford University Press.
- Bolino, M. C., Turnley, W. H., & Bloodgood, J. M. (2002). Citizenship behaviour and the creation of social capital in organizations. *The Academy of Management Review*, 27, 505-522.
- Boydell, T., & Leary, M. (1994). From management development to managing development: The changing role of the manager in the learning organization. *Transitions*, 94(9), 8-9.
- Boyle, E. (2002). A critical appraisal of the performance of Royal Dutch Shell as a learning organization in the 1990s. *The Learning Organization*, 9(1), 6-18.
- Bradley, B. H., Postlethwaite, B. E., Klotz, A. C., Hamdani, M. R., & Brown, K. G. (2012). Reaping the benefits of task conflict in teams: the critical role of team psychological safety climate. *Journal of Applied Psychology*, 97(1), 151.
- Brett, J. F., & VandeWalle, D. (1999). Goal orientation and goal content as predictors of performance in a training program. *Journal of Applied Psychology*, 84, 863-873.
- Breevaart, K., Bakker, A., Hetland, J., Demerouti, E., Olsen, O. K., & Espevik, R. (2014). Daily transactional and transformational leadership and daily employee engagement. *Journal of occupational and organizational psychology*, 87(1), 138-157.
- Brown, J. S. & Duguid, P. (1991). *Organizational Learning And Communities-Of-Practice: Toward A Unified View Of Working, Learning, And Innovation*. *Organization Science*, 2, 40-57.

- Brown, C. A., & Busman, M. (2003). Expatriate health-care workers and maintenance of standards of practice factors affecting service delivery in Saudi Arabia. *International Journal of Health Care Quality Assurance*, 16, 347-353.
- Brower, H. H., Schoorman, F. D., & Tan, H. H. (2000). A model of relational leadership: the integration of trust and leader-member exchange. *Leadership Quarterly*, 11(2), 227-250.
- Bryant, S. E. (2003). The role of transformational and transactional leadership in creating, sharing and exploiting organizational knowledge. *Journal of Leadership & Organizational Studies*, 9(4), 32-44.
- Bryk, A. S., & Schneider, B. (2003). Trust in schools: A core resource for school reform. *Educational Leadership*, 60(6), 40-44.
- Bui, H. T., Baruch, Y., Chau, V. S., & He, H. W. (2016). Team learning: The missing construct from a cross-cultural examination of higher education. *Asia Pacific Journal of Management*, 33(1), 29-51.
- Bunderson, J. S., & Sutcliffe, K. M. (2003). Management team learning orientation and business unit performance. *Journal of Applied Psychology*, 88, 552-560.
- Burke, C. B., Sims, D. E., Lazzara, E. H., & Salas, E. (2007). Trust in leadership: a multi-level review and integration. *Leadership Quarterly*, 18(6), 606-632.
- Burns, J. M. (1978). *Leadership*. New York, NY: Harper and Row Publishers.
- Business Dictionary. (2017). Retrieved from <http://www.businessdictionary.com>
- Button, S. B., Mathieu, J. E., & Zajac, D. M. (1996). Goal orientation in organizational research: A conceptual and empirical foundation. *Organizational Behaviour and Human Decision Processes*, 67, 26-48.
- Bycio, P., Hackett, R. D., & Allen, J. S. (1995). Further assessments of Bass's (1985) conceptualization of transactional and transformational leadership. *Journal of Applied Psychology*, 80(4), 468-78.
- Byrne, B. (2010). *Multivariate applications series. Structural equation modeling with AMOS: Basic concepts, applications, and programming*. New York: Routledge/Taylor & Francis Group.
- Cabrera, E. F., & Cabrera, A. (2005). Fostering knowledge sharing through people management practices. *The International Journal of Human Resource Management*, 16, 720-735.
- Caillier, J. G. (2012–2013). Agency retaliation against whistle-blowers: Factors affecting employee perceptions. *Public Integrity*, 15(1), 29-50.
- Caillier, J. G., & Sa, Y. (2017). Do transformational-oriented leadership and transactional-oriented leadership have an impact on whistle-blowing

attitudes? A longitudinal examination conducted in US federal agencies. *Public Management Review*, 19(4), 406-422.

- Carmeli, A., Brueller, D., & Dutton, J. E. (2009). Learning behaviours in the workplace: The role of high- quality interpersonal relationships and psychological safety. *Systems Research and Behavioural Science*, 26(1), 81-98.
- Caruso, H. M., & Wooley, A. W. (2008). Harnessing the power of emergent interdependence to promote diverse team collaboration. In K. W. Phillips (Ed.), *Research on managing groups and teams* (Vol. 11: Diversity and groups, pp. 245-266). Bingley, UK: Emerald.
- Cellar, D. F., Stuhlmacher, A. F., Young, S. K., Fisher, D. M., Adair, C. K., Haynes, S., et al. (2011). Trait goal orientation, self-regulation, and performance: A meta-analysis. *Journal of Business and Psychology*, 26, 467-483. doi:10.1007/s10869010-9201-6.
- Chadwick, I. C., & Raver, J. L. (2015). Motivating organizations to learn goal orientation and its influence on organizational learning. *Journal of Management*, 41, 957-986.
- Chen, G. (2005). Newcomer adaptation in teams: Multilevel antecedents and outcomes. *Academy of Management Journal*, 48, 101-116.
- Chen, G., & Kanfer, R. (2006). Toward a systems theory of motivated behaviour in work teams. In B. M. Staw (Ed.), *Research in organizational behaviour*, 27, 223–267. Greenwich, CT: JAI.
- Chen, G., & Mathieu, J. E. (2008). Goal orientation dispositions and performance trajectories: The roles of supplementary and complementary situational inducements. *Organizational Behaviour and Human Decision Processes*, 106(1), 21-38.
- Chen, X. P., Eberly, M. B., Chiang, T. J., Farh, J. L., & Cheng, B. S. (2014). Affective trust in Chinese leaders: linking paternalistic leadership to employee performance. *Journal of Management*, 40, 796-819.
- Chiva-Gomez, R. (2004). The facilitating factors for organizational learning in the ceramic sector. *Human Resource Development International*, 7, 233-249.
- Cohen, E., & Tichy, N. (1998). Teaching: the heart of leadership. *The Healthcare Forum Journal*, 41(2), 20.
- Cohen, M. D., & Bacdayan, P. (1994). Organizational routines are stored as procedural memory: Evidence from a laboratory study. *Organization science*, 5(4), 554-568.
- Cohen, L., Manion, L., & Morrison, (2000). *Research methods in education* (5th ed.). London: Routledge Falmer.

- Colquitt, J., Scott, B. A., & LePine, J. A. (2007). Trust, trustworthiness, and trust propensity: A meta-analytic test of their unique relationships with risk taking and job performance. *Journal of Applied Psychology, 92*, 909-927.
- Conger, J. A. (1999). Charismatic and transformational leadership in organizations: an insider's perspective on these developing streams of research. *The Leadership Quarterly, 10*(2), 145-79.
- Conger, J. A., & Kanungo, R. N. (1998). *Charismatic leadership in organizations*. Thousand Oaks, CA: Sage.
- Cook, J., & Wall, T. (1980). New work attitude measures of trust, organizational commitment and personal need non-fulfilment. *Journal of Occupational Psychology, 53*, 39-52.
- Costa, A. C., & Anderson, N. (2011). Measuring trust in teams: Development and validation of a multifaceted measure of formative and reflective indicators of team trust. *European Journal of Work and Organizational Psychology, 20*(1), 119-154.
- Covington, M. V. (2000). Goal theory, motivation, and school achievement: An integrative review. *Annual Review of Psychology, 51*, 171-200.
- Crandall, V. C., Katkovsky, W., & Crandall, V. J. (1965). Children's beliefs in their own control of reinforcements in intellectual academic achievement situations. *Child Development, 36*, 91-109.
- Crossan, M., Lane, H., & White, R. (1999). An organizational learning framework: From intuition to institution. *Academy of Management Review, 24*, 522-538.
- Darnon, C., Dompnier, B., Delmas, F., Pulfrey, C., & Butera, F. (2009). Achievement goal promotion at university: Social desirability and social utility of mastery and performance goals. *Journal of Personality and Social Psychology, 96*(1), 119-34.
- Darnon, C., Muller, D., Schrager, S. M., Pannuzzo, N., & Butera, F. (2006). Mastery and performance goals predict epistemic and relational conflict regulation. *Journal of Educational Psychology, 98*(4), 766-776.
- Davis, J. H., Schoorman, F. D., Mayer, R. C., & Tan, H. H. (2000). The trusted general manager and business unit performance: Empirical evidence of a competitive advantage. *Strategic Management Journal, 21*, 563-576.
- De Cremer, D. (2006). Affective and motivational consequences of leader self-sacrifice: The moderating effect of autocratic leadership. *The Leadership Quarterly, 17*, 79-93.

- DeChurch, L. A., & Mesmer-Magnus, J. R. (2010). The cognitive underpinnings of effective teamwork: A meta-analysis. *Journal of Applied Psychology, 95*(1), 32-53.
- Deichmann, D., & Stam, D. (2015). Leveraging transformational and transactional leadership to cultivate the generation of organization-focused ideas. *The Leadership Quarterly, 26*(2), 204-219.
- DeShon, R. P., & Gillespie, J. Z. (2005). A motivated action theory account of goal orientation. *Journal of Applied Psychology, 90*, 1096-1127.
- Dess, G. G., & Picken, J. C. (2000). Changing roles: leadership in the 21st century. *Organizational Dynamics, 28*(3), 18-34.
- DeVellis, R. F. (2016). *Scale development: Theory and applications* (Vol. 26). Sage Publications.
- Dewey, J. (1986). *How we think: A restatement of the relation of reflective thinking to the educative process*. Lexington, MA: D.C. Heath and Company.
- Diener, C. I., & Dweck, C. S. (1978). An analysis of learned helplessness: Continuous changes in performance, strategy, and achievement cognitions following failure. *Journal of Personality and Social Psychology, 36*, 451-462.
- Diener, C. I., & Dweck, C. S. (1980). An analysis of learned helplessness: II. The processing of success. *Journal of Personality and Social Psychology, 39*, 940-952.
- Dirks, K. T., & Ferrin, D. L. (2001). The role of trust in organizational settings. *Organization Science, 12*(4), 450-467.
- Dirks, K. T., & Ferrin, D. L. (2002). Trust in leadership: Meta-analytic findings and implications for research and practice. *Journal of Applied Psychology, 87*, 611-628.
- Dutton, J. E. (2003). *Energize your workplace: How to build and sustain high-quality relationships at work*. San Francisco, CA: Jossey-Bass.
- Dvir, T., Eden, D., Avolio, B. J., & Shamir, B. (2002). Impact of transformational leadership on follower development and performance: A field experiment. *Academy of Management Journal, 45*, 735-744.
- Dweck, C. S. (1986). Motivational processes affecting learning. *American Psychologist, 41*, 1040.
- Dweck, C. S. (1999). *Self-theories: Their role in motivation, personality, and development*. Ann Arbor, MI: Psychology Press.
- Dweck, C. S., & Leggett, E. L. (1988). A social-cognitive approach to motivation and personality. *Psychological Review, 95*, 256.

- Eagly, A. H. (1987). Reporting sex differences.
- Eagly, A. H., & Kite, M. E. (1987). Are stereotypes of nationalities applied to both women and men? *Journal of personality and social psychology*, 53(3), 451.
- Earley, P. C., & Ang, S. (2003). *Cultural intelligence: Individual interactions across cultures*. Stanford, CA: Stanford Business Books.
- Easterby-Smith, M., & Cunliffe, A. L. (2017). From reflection to practical reflexivity: Experiential learning as lived experience. In *Organizing reflection* (pp. 44-60). Routledge.
- Easterby-Smith, M., & Lyles, M. A. (Eds.). (2011). *Handbook of organizational learning and knowledge management*. John Wiley & Sons.
- Edmondson, A. (1999a). Psychological safety and learning behaviour in work teams. *Administrative Science Quarterly*, 44(2), 350-383.
- Edmondson, A. (1999b). A psychological safety net: Investigating organizational learning at the group level of analysis. Working Paper, Harvard Business School, October 4, 1999. Boston, MA.
- Edmondson, A. C. (2002). Managing the risk of learning: psychological safety in work teams. In M. West, D. Tjosvold, & K. Smith (Eds.), *International handbook of organizational teamwork and cooperative working* (pp. 255-275). London: Blackwell.
- Edmondson, A. C. (2003). Speaking up in the operating room: How team leaders promote learning in interdisciplinary action teams. *Journal of Management Studies*, 40, 1419-1452.
- Edmondson, A. C. (2004). Psychological safety, trust, and learning in organizations: A group-level lens. In R. M. Kramer, & K. S. Cook (Eds.), *Trust and distrust in organizations: Dilemmas and approaches* (pp. 239-272). New York: Russell Sage Foundation.
- Edmondson, A. C., & Lei, Z. K. (2014). Psychological safety: The history, renaissance, and future of an interpersonal construct. *Annual Review of Organizational Psychology and Organizational Behaviour*, 1(1), 23-43.
- Edmondson, A. C., Bohmer, R. M., & Pisano, G. P. (2001). Disrupted routines: team learning and new technology implementation in hospitals. *Administrative Science Quarterly*, 46(4), 685-716.
- Edmondson, A. C., Kramer, R. M., & Cook, K. S. (2004). Psychological safety, trust, and learning in organizations: A group-level lens. *Trust and Distrust in Organizations: Dilemmas and Approaches*, 12, 239-272.
- Edmondson, A. C., Higgins, M., Singer, S., & Weiner, J. (2016). Understanding psychological safety in health care and education organizations: A comparative perspective. *Research in Human Development*, 13(1), 65-83.

- Ellinger, A. D., Watkins, K. E., & Bostrom, R. P. (1999). Managers as facilitators in learning organizations. *Human Resource Development Quarterly*, 10(2), 105-25.
- Elliot, A. J. (1999). Approach and avoidance motivation and achievement goals. *Educational Psychologist*, 34, 169-189.
- Elliot, A. J. (2005). A conceptual history of the achievement goal construct. In A. J. Elliot, & C. S. Dweck (Eds.), *Handbook of competence and motivation* (pp. 52–72). New York: The Guilford Press.
- Elliot, A. J., & McGregor, H. A. (2001). A 2 x 2 achievement goal framework. *Journal of Personality and Social Psychology*, 80, 501-514.
- Embry, K. (2010). A subordinate description of the experience of working with a supervisor that is using transformational leadership: a qualitative study. Dissertation, Capella University.
- Enders, C. K. (2010). *Applied missing data analysis*. Guilford Press.
- Fahey, L., & Prusak, L. (1998). The eleven deadliest sins of knowledge management. *California Management Review*, 40(3), 265-76.
- Fard, H. D., Rostamy, A. A. A., & Taghiloo, H. (2009). How types of organisational cultures contribute in shaping learning organisations. *Singapore Management Review*, 31, 49.
- Fiedler, F. E. (1996). Research on Leadership Selection and Training: One View of the Future. *Administrative Science Quarterly*, 41, 241-50.
- Fiol, C. M., & Lyles, M. A. (1985). Organizational learning. *Academy of Management Review*, 10, 803-13.
- Fisher, S. L., & Ford, J. K. (1998). Differential effects of learner effort and goal orientation on two learning outcomes. *Personnel Psychology*, 51, 397-420.
- Franklin, D. A., Porter, C. O., & Swider, B. W. (2013, January). The interactive effects of team content goals and leader goal orientation. In *Academy of Management proceedings* (Vol. 2013, No. 1, p. 10671). Academy of Management.
- Fryer, J. W., & Elliot, A. J. (2007). Stability and change in achievement goals. *Journal of Educational Psychology*, 99, 700-714.
- Gal, R. (1985). Commitment and obedience in the military: An Israeli case study. *Armed Forces & Society*, 11, 553-564.
- Gallucci, C. (2008). Districtwide instructional reform: Using sociocultural theory to link professional learning to organizational support. *American Journal of Education*, 114(4), 541-58.

- García Morales, V. J., Lloréns Montes, F. J., & Verdú Jover, A. J. (2008). The effects of transformational leadership on organizational performance through knowledge and innovation. *British Journal of Management*, 19(4), 299-319.
- Garvin, D. A., Edmondson, A. C., & Gino, F. (2008). Is yours a learning organization? *Harvard Business Review*, 86(3), 109-116.
- Gebert, D. (2004). *Innovation durch Teamarbeit: eine kritische Bestandsaufnahme*. Stuttgart: Kohlhammer.
- Gebert, D., Boerner, S., & Kearney, E. (2006). Crossfunctionality and innovation in new product development teams: The dynamics of the dilemmatic structure and consequences for the management of diversity. *European Journal of Work and Organizational Psychology*, 15(4), 431-458.
- Given, L. M. (2008). *The Sage encyclopedia of qualitative research methods*. Sage Publications.
- Goh, S. C. (1998). Toward a learning organization: The strategic building blocks. *SAM Advanced Management Journal*, 63, 15.
- Goh, S. C. (2002). Managing effective knowledge transfer: an integrative framework and some practice implications. *Journal of Knowledge Management*, 6, 23-30.
- Goh, S., & Richards, G. (1997). Benchmarking the learning capability of organizations. *European Management Journal*, 15, 575-583.
- Goh, S., Cousins, J., & Elliott, C. (2006). Organizational learning capacity, evaluative inquiry and readiness for change in schools: Views and perceptions of educators. *Journal of Educational Change*, 7(4), 289-318.
- Goleman, D., Boyatzis, R., & McKee, A. (2001). Primal leadership: The hidden driver of great performance. *Harvard Business Review*, 79(6), 42-51.
- Gong, Y., & Fan, J. (2006). Longitudinal examination of the role of goal orientation in cross-cultural adjustment. *Journal of Applied Psychology*, 91(1), 176.
- Gong, Y., Kim, T. Y., Lee, D. R., & Zhu, J. (2013). A multilevel model of team goal orientation, information exchange, and creativity. *Academy of Management Journal*, 56(3), 827-851.
- Gorli, M., Nicolini, D., & Scaratti, G. (2015). Reflexivity in practice: Tools and conditions for developing organizational authorship. *human relations*, 68(8), 1347-1375.
- Graen, G. B., & Uhl-Bien, M. (1995). Relationship-based approach to leadership: Development of leader-member exchange (LMX) theory of leadership over 25 years: Applying a multi-level multi-domain perspective. *The Leadership Quarterly*, 6, 219-247.



- Grojean, M. W., Resick, C. J., Dickson, M. W., & Smith, D. B. (2004). Leaders, values, and organizational climate: Examining leadership strategies for establishing an organizational climate regarding ethics. *Journal of Business Ethics*, 55(3), 223-241.
- Gu, Q., Tang, T. L. P., & Jiang, W. (2015). Does moral leadership enhance employee creativity? Employee identification with leader and leader-member exchange (LMX) in the Chinese context. *Journal of Business Ethics*, 126(3), 513-529.
- Guzzo, R. A., Yost, P. R., Campbell, R. J., & Shea, G. P. (1993). Potency in groups: Articulating a concept. *British Journal of Social Psychology*, 32, 87-106.
- Hackman, J. R. (1986). *The psychology of self-management in organizations*. Washington, DC: American Psychological Association.
- Hair, J. F. (2011). Multivariate data analysis: an overview *International encyclopedia of statistical science* (pp. 904-907). Springer.
- Hair, E., Halle, T., Terry-Humen, E., Lavelle, B., & Calkins, J. (2006). Children's school readiness in the ECLS-K: Predictions to academic, health, and social outcomes in first grade. *Early Childhood Research Quarterly*, 21(4), 431-454.
- Hamstra, M. R., Van Yperen, N. W., Wisse, B., & Sassenberg, K. (2014). Transformational and transactional leadership and followers' achievement goals. *Journal of Business and Psychology*, 29(3), 413-425.
- Hannah, S. T., & Lester, P. B. (2009). A multilevel approach to building and leading learning organizations. *The Leadership Quarterly*, 20, 34-48.
- Handley, K., Sturdy, A., Fincham, R., & Clark, T. (2006). Within and beyond communities of practice: Making sense of learning through participation, identity and practice. *Journal of management studies*, 43(3), 641-653.
- Harackiewicz, J. M., Barron, K. E., Pintrich, P. R., Elliot, A. J., & Thrash, T. M. (2002). Revision of achievement goal theory: Necessary and illuminating. *Journal of Educational Psychology*, 94, 638-645.
- Harari, O., & Brewer, L. (2004). If Colin Powell had commanded Enron: The hidden foundation of leadership. *Business Strategy Review*, 15(2), 37-45.
- Harrington, D. (2009). *Confirmatory factor analysis*. Oxford University Press.
- Harvey, K. L. (2009). SPSS Survival Manual: A step-by-step guide to data analysis using SPSS version 15. *Nurse Researcher*, 16(3), 89-90.
- Hayes, A. F., & Preacher, K. J. (2014). Statistical mediation analysis with a multicategorical independent variable. *British Journal of Mathematical and Statistical Psychology*, 67(3), 451-470.
- Hemphill, J. K., & Coons, A. E. (1957). Development of the leader behaviour description questionnaire. In R. M. Stogdill, & A. E. Coons (Eds.),

Leadership behaviour: Its description and measurement. Columbus, OH: The Ohio State University, Bureau of Business Research.

Heyck, H., & Simon, H. A. (2005). *The bounds of reason in modern America*. Johns Hopkins University Press.

Heyman, G. D., & Dweck, C. S. (1992). Achievement goals and intrinsic motivation: Their relation and their role in adaptive motivation. *Motivation and Emotion*, 16, 231-247.

Higgins, M., Ishimaru, A., Holcombe, R., & Fowler, A. (2012). Examining organizational learning in schools: The role of psychological safety, experimentation, and leadership that reinforces learning. *Journal of Educational Change*, 13(1), 67-94.

Hitt, W. D. (1995). The learning organization: some reflections on organizational renewal. *Leadership & Organization Development Journal*, 16(8), 17-25.

Hoel, H., & Salin, D. (2003). Organizational antecedents of workplace bullying. In S. Einarsen, H. Hoel, D. Zapf, & C. L. Cooper (Eds.), *Bullying and emotional abuse in the workplace: International perspectives in research and practice* (pp. 203–218). London: Taylor & Francis.

Hornsey, M. J. (2008). Social identity theory and self- categorization theory: A historical review. *Social and Personality Psychology Compass*, 2(1), 204-222.

Hollnthoner, M. (2010). *Knowledge transfer and trust in networks* (Doctoral dissertation). Uniwien.

Honig, M. I. (2008). District central offices as learning organizations: How sociocultural and organizational learning theories elaborate district central office administrators' participation in teaching and learning improvement efforts. *American Journal of Education*, 114(4), 627-664.

House, R. (1971). A path-goal theory of leadership. *Journal of Contemporary Business*, 3, 81-97.

Howell, J. M., & Avolio, B. J. (1993). Transformational leadership, transactional leadership, locus of control and support for innovation: Key predictors of consolidated-business-unit performance. *Journal of Applied Psychology*, 78, 891-902.

Hubbard, L., Mehan, H., & Stein, M. K. (2006). *Reform as learning: When school reform collides with school culture and community politics*. New York: Routledge.

Hulleman, C. S., Schrage, S. M., Bodmann, S. M., & Harackiewicz, J. M. (2010). A meta-analytic review of achievement goal measures: Different labels for the same constructs or different constructs with similar labels? *Psychological Bulletin*, 136, 422–449.

- Hult, G. T. M., & Ferrell, O. C. (1997). Global organizational learning capacity in purchasing: Construct and measurement. *Journal of Business Research*, 40(2), 97-111.
- Inkpen, A. C. & Crossan, M. M. (1995). Believing Is Seeing: Joint Ventures And Organization Learning. *Journal Of Management Studies*, 32, 595-618.
- Ilies, R., Morgeson, F. P., & Nahrgang, J. D. (2005). Authentic leadership and eudaemonic well-being: Understanding leader–follower outcomes. *The Leadership Quarterly*, 16(3), 373-394.
- Janssen, O., & Van Yperen, N. W. (2004). Employees' goal orientations, the quality of leader-member exchange, and the outcomes of job performance and job satisfaction. *Academy of Management Journal*, 47, 368-384.
- James, C. R. (2003). Designing learning organizations. *Organizational Dynamics*, 32, 46-61.
- Javed, B., Rawwas, M. Y., Khandai, S., Shahid, K., & Tayyeb, H. H. (2018). Ethical leadership, trust in leader and creativity: The mediated mechanism and an interacting effect. *Journal of Management & Organization*, 1-18.
- Jerez-Gomez, P., Céspedes-Lorente, J., & Valle-Cabrera, R. (2005). Organizational learning capability: a proposal of measurement. *Journal of Business Research*, 58(6), 715-725.
- Johnson-George. G. E., & Swap. W. G. (1982). Measurement of specific interpersonal trust: Gonstruction and validation of a scale to assess trust in a specific other. *Journal of Personality and Social Psychology*, 43, 1306-1317.
- Jones, G. R., & George, J. M. (1998). The experience and evolution of trust: Implications for cooperation and teamwork. *Academy of Management Review*, 23(3), 531-546.
- Judge, T. A., & Piccolo, R. F. (2004). Transformational and transactional leadership: A meta-analytic test of their relative validity. *Journal of Applied Psychology*, 89, 755-768.
- Judge, T. A., Piccolo, R. F., & Ilies, R. (2004). The forgotten ones? The validity of consideration and initiating structure in leadership research. *Journal of Applied Psychology*, 89, 36-51.
- Jung, D. (2001). Transformational and transactional leadership and their effects on creativity in groups. *Creativity Research Journal*, 13, 185-95.
- Jung, D., & Avolio, B. (2000). Opening the black box: an experimental investigation of the mediating effects of trust and value congruence on transformational and transactional leadership. *Journal of Organizational Behaviour*, 21(8), 949-64.

- Kahai, S. S., Sosik, J. J., & Avolio, B. J. (2003). Effects of leadership style, anonymity, and rewards on creativity-relevant processes and outcomes in an electronic meeting system context. *The Leadership Quarterly*, 14, 499-524.
- Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, 33, 692-724.
- Kaplan, A., & Flum, H. (2010). Achievement goal orientations and identity formation styles. *Educational Research Review*, 5(1), 50-67.
- Kaplan, A., & Maehr, M. L. (2007). The contributions and prospects of goal orientation theory. *Educational Psychology Review*, 19, 141-184.
- Kark, R., & Carmeli, A. (2009) Alive and creating: the mediating role of vitality and aliveness in the relationship between psychological safety and creative work involvement. *Journal of Organizational Behaviour*, 30(6), 785-804.
- Kasl, E., Marsick, V. J., & Dechant, K. (1993). Teams as learners: A research based model of team learning. *Journal of Applied Behavioural Science*, 33(2), 227-246.
- Keegan, A. D., & Hartog, D. N. D. (2004). Transformational leadership in a project-based environment: a comparative study of the leadership styles of project managers and line managers. *International Journal of Project Management*, 22(8), 609-617.
- Kelloway, E. K., Sivanathan, N., Francis, L., & Barling, J. (2005). Poor leadership. In J. Barling, E. K. Kelloway & M. R. Frone (Eds.), *Handbook of work stress*. Thousand Oaks, CA: Sage.
- Kim, D. H. (1998). The link between individual and organizational learning. *The strategic management of intellectual capital*, 41-62.
- KOFSMAN, F. & SENGE, P. M. (1993). Communities of commitment: The heart of learning organizations. *Organizational dynamics*, 22, 5-23.
- Kostopoulos, K. C., Spanos, Y. E., & Prastacos, G. P. (2013). Structure and function of team learning emergence: A multilevel empirical validation. *Journal of Management*, 39(6), 1430-1461.
- Kotter, J. P. (1996). *Leading Change*. Boston, MA: Harvard Business School Press.
- Kozlowski, S. W., Gully, S. M., Brown, K. G., Salas, E., Smith, E. M., & Nason, E. R. (2001). Effects of training goals and goal orientation traits on multidimensional training outcomes and performance adaptability. *Organizational Behaviour and Human Decision Processes*, 85(1), 1-31.
- Kramer, R. M. (1999). Trust and distrust in organizations: Emerging perspectives, enduring questions. *Annual Review of Psychology*, 50, 569-598.

- Lähtenmäki, S., Toivonen, J., & Mattila, M. (2001). Critical aspects of organizational learning research and proposals for its measurement. *British Journal of Management*, 12(2), 113-129.
- Lam, Y. L. (2002). Defining the effects of transformation leadership on organization learning: A cross-cultural comparison. *School Leadership and Management*, 22(4), 439-52.
- Lant, T. K. and Mezias, S. J. (1990). Managing discontinuous change: a simulation study of organizational learning and entrepreneurship. *Strategic Management Journal*, 11, 147-79.
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge University Press.
- Leach, D., Wall, T. D., & Jackson, P. R. (2003). The effect of empowerment on job knowledge: An empirical test involving operators of complex technology. *Journal of Occupational & Organizational Psychology*, 76, 27-53.
- Leary, M. R. (2007). Motivational and emotional aspects of the self. *Annual Review of Psychology*, 58, 317-344.
- Lee, F. K., Sheldon, K. M., & Turban, D. B. (2003). Personality and the goal-striving process: The influence of achievement goal patterns, goal level, and mental focus on performance and enjoyment. *Journal of Applied Psychology*, 88, 256-265.
- Leithwood, K., & Menzies, T. (1998). Forms and effects of school-based management: a review. *Educational Policy*, 12(3), 325-46.
- Leonard-Barton, D. (1995). *Wellsprings of knowledge: Building and sustaining the sources of innovation*. Boston: Harvard Business School Press.
- Levin, D. Z., Cross, R., & Abrams, L. C. (2004). The strength of weak ties you can trust. Working Paper, Rutgers Business School.
- Levitt, B., & March, J. G. (1988). Organizational learning. *Annual review of sociology*, 14(1), 319-338.
- Lewin, K., Lippitt, R., & White, R. K. (1939). Patterns of aggressive behaviour in experimentally created social climates. *Journal of Social Psychology*, 10, 271-301.
- Lewis, J. D., & Weigert, A. (1985). Trust as a social reality. *Social Forces*, 63(4), 967-985.
- Li, A. N., & Tan, H. H. (2013). What happens when you trust your supervisor? Mediators of individual performance in trust relationships. *Journal of Organizational Behaviour*, 34(3), 407-425.

- Licht, B. G., & Dweck, C. S. (1984). Determinants of academic achievement: The interaction of children's achievement orientations with skill area. *Developmental Psychology*, 20, 628-636.
- Likert, R. (1961). *New patterns of management*. New York: McGraw-Hill.
- Lindell, M. K., & Whitney, D. J. (2001). Accounting for Common Method Variance in Cross-Sectional Research Designs. *Journal of Applied Psychology*, 86(1), 114-121.
- Lipshitz, R. & Popper, M. (2000). Organizational learning in a hospital. *The Journal of Applied Behavioral Science*, 36, 345-361.
- Lipshitz, R., Popper, M. & Friedman, V. J. (2002). A multifacet model of organizational learning. *The journal of applied behavioral science*, 38, 78-98.
- Locke, E. A., & Latham, G. P. (1990). Work motivation and satisfaction: Light at the end of the tunnel. *Psychological Science*, 1(4), 240-246.
- Locke, E. A., & Latham, G. P. (2002). Building a practically useful theory of goal setting and task motivation: A 35-year odyssey. *American Psychologist*, 57, 705-717.
- Losada, M., & Heaphy, E. (2004). The role of positivity and negativity in the performance of business teams. *The American Behavioural Scientist*, 47, 740-765.
- Lukyanenko, R., Evermann, J., & Parsons, J. (2014). Instantiation validity in IS design research. Paper presented at the International Conference on Design Science Research in Information Systems.
- Luthans, F. (2005). *Organizational behaviour* (10th ed.). McGraw-Hill/Irwin Publication.
- Maani, K., & Benton, C. (1999). Rapid team learning: lessons from team New Zealand America's cup campaign. *Organizational Dynamics*, 28(4), 48-62.
- Macneil, C. (2001). The supervisor as a facilitator of informal learning in work teams. *Journal of Workplace Learning*, 13(6), 246-53.
- Mahoney, T. A., Jardee, T. H., & Allan, N. N. (1960). Predicting managerial effectiveness. *Personnel Psychology*, Summer, 147-63.
- Mallak, L. A., Lyth, D. M., Olson, S. D., Ulshafer, S. M., Ulshafer, S. M., & Sardone, F. J. (2003). Culture, the built environment and healthcare organizational performance. *Managing Service Quality: An International Journal*, 13, 27-38.
- March, J. G. (1991). Exploration and exploitation in organizational learning. *Organization Science*, 2, 71-87.

- Marczyk, G., DeMatteo, D., & Festinger, D. (2005). *Essentials of research design and methodology*. New Jersey: John Wiley and Sons, Inc.
- Marks, M. A., Mathieu, J. E., & Zaccaro, S. J. (2001). A temporally based framework and taxonomy of team processes. *Academy of Management Review*, 26(3), 356-376.
- Marsick, V. J., & Watkins, K. E. (2003). Demonstrating the value of an organization's learning culture: the dimensions of the learning organization questionnaire. *Advances in developing human resources*, 5(2), 132-151.
- Marsick, V. J., & Watkins, K. E. (1997). Lessons from informal and incidental learning. In J. Burgoyne, & M. Reynolds (Eds.), *Management learning: Integrating perspectives in theory and practice* (pp. 295-311). Thousand Oaks, CA: Sage.
- Martin, R., & Epitropaki, O. (2001). Role of organizational identification on implicit leadership theories (ILTs), transformational leadership and work attitudes. *Group Processes & Intergroup Relations*, 4(3), 247-262.
- Mascret, N., Elliot, A. J., & Cury, F. (2017). The 3× 2 Achievement Goal Questionnaire For Teachers. *Educational Psychology*, 37(3), 346-361.
- Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology*, 52, 397-422.
- Maurer, T. J., Weiss, E. M., & Barbeite, F. G. (2003). A model of involvement in work-related learning and development activity: the effects of individual, situational, motivational, and age variables. *Journal of Applied Psychology*, 88, 707.
- May, D. R., Gilson, R. L., & Harter, L. M. (2004). The psychological conditions of meaningfulness, safety and availability and the engagement of the human spirit at work. *Journal of Occupational and Organizational Psychology*, 77, 11-37.
- Mayfield, C. O., Tombaugh, J. R., & Lee, M. (2016). Psychological collectivism and team effectiveness: Moderating effects of trust and psychological safety. *Academy of Educational Leadership Journal*, 20(1), 78.
- McCleskey, J. A. (2014). Situational, transformational, and transactional leadership and leadership development. *Journal of Business Studies Quarterly*, 5(4), 117.
- McAllister, D. (1995). Affect- and cognition-based trust as foundations for interpersonal cooperation in organizations. *Academy of Management Journal*, 38, 24-59.
- McGill, M. E., & Slocum, J. W. (1998). A little leadership, please. *Organizational Dynamics*, 26(3), 39-49.

- McGill, M. E., Slocum, J. W., & Lei, D. (1992). Management practices in learning organizations. *Organizational Dynamics*, 21(1), 5-17.
- Meglino, B. M., Ravlin, E. C., & Adkins, C. L. (1989). A work values approach to corporate culture: value congruence process and its relationship to individual outcomes. *Journal of Applied Psychology*, 74(3), 424-432.
- Mesmer-Magnus, J. R., & C. Viswesvaran. (2005). Whistle-blowing in organizations: An examination of correlates of whistle-blowing intentions, actions, and retaliation. *Journal of Business Ethics*, 62(3), 277-297.
- Meyerson, D., Weick, K. E., & Kramer, R. M. (1996). Swift trust and temporary groups. In R. M. Kramer, & Tyler, T. R. (Eds.), *Trust in organizations: Frontiers of theory and research*. Thousand Oaks, CA: Sage.
- Miah, A. Q. (2016). *Applied Statistics for Social and Management Sciences*: Springer.
- Middleton, M., Kaplan, A., & Midgley, C. (2004). The change in middle school students' achievement goals in mathematics over time. *Social Psychology of Education*, 7, 289-311.
- Miles, R., & Snow, C. (1978). *Organizational strategy, structure, and process*. New York: McGraw-Hill.
- Miles, R. E., & Snow, C. C. (1992). Causes of failure in network organizations. *California Management Review*, 34, 93-72.
- Mischel, W. (1973). Toward a cognitive social learning reconceptualization of personality. *Psychological Review*, 80(4), 252.
- Mullins, L. J. (1999). *Management and organizational behaviour*. London: Financial Times
- Mumford, M. D., & Gustafson, S. B. (1988). Creativity syndrome: Integration, application, and innovation. *Psychological Bulletin*, 103, 27-43.
- Nahavandi, A. (1993). Integrating leadership and strategic management in organizational theory. *Canadian Journal of Administrative Science*, 10, 297-307.
- Nanus, B. (1989). *The leader's edge: The seven keys to leadership in a turbulent world*. Chicago, IL: Contemporary Books.
- Neuman, W., L. (2003). *Social research methods: Qualitative and quantitative approaches (5th ed.)*. Boston: Allyn and Bacon.
- Nixon, D. (2009). I Can't Put a Smiley Face On': Working- Class Masculinity, Emotional Labour and Service Work in the 'New Economy. *Gender, Work & Organization*, 16(3), 300-322.



- Nonaka, I., Toyama, R., & Konno, N. (2000), SECI, BA and Leadership. *Long Range Planning*, 33, 5-34.
- Nonaka, I., & Takeuchi, H. (1995). *The knowledge-creating company*. New York, NY: Oxford University Press.
- Northouse, P. G. (2016). *Leadership theory and practice (7th ed.)*, Los Angeles, CA: SAGE.
- Noruzi, A., Dalfard, V. M., Azhdari, B., Nazari-Shirkouhi, S., & Rezazadeh, A. (2013). Relations between transformational leadership, organizational learning, knowledge management, organizational innovation, and organizational performance: an empirical investigation of manufacturing firms. *The International Journal of Advanced Manufacturing Technology*, 1-13.
- Oswald, S. L., Mossholder, K. W., & Harris, S. G. (1994). Vision salience and strategic involvement: Implications for psychological attachment to organization and job. *Strategic Management Journal*, 15(6), 477-489.
- Parasuraman, P., V. A. Zeithaml, & L. L. Berry (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, Spring, 12-39.
- Park, G., & DeShon, R. P. (2010) A multilevel model of minority opinion expression and team decision-making effectiveness. *Journal of Applied Psychology*, 95: 824-833.
- Payne, S. C., Youngcourt, S. S., & Beaubien, J. (2007). A meta-analytic examination of the goal orientation nomological net. *Journal of Applied Psychology*, 92, 128-150.
- Pearce, C. L. (2004). The future of leadership: combining vertical and shared leadership to transform knowledge work. *Academy of Management Executive*, 18, 47-57.
- Pennings, J. M., & Woiceshyn, J. (1987). A typology of organizational control and its metaphors. *Research in the Sociology of Organizations*, 5(73), 104.
- Perez Lopez, S., Manuel Montes Peon, J., & Jose Vazquez Ordas, C. (2005). Organizational learning as a determining factor in business performance. *The Learning Organization*, 12, 227-245.
- Perretti, F. & Negro, G. (2006). Filling empty seats: How status and organizational hierarchies affect exploration versus exploitation in team design. *Academy of Management Journal*, 49, 759-777.
- Petersitzke, M. (2009). Supervisor psychological contract management. In *Supervisor psychological contract management* (pp. 131-142). Gabler.

- Pillai, R., Schreisheim, C., & Williams, E. (1999). Fairness perceptions and trust as mediators for transformational and transactional leadership: a two-sample study. *Journal of Management*, 25(6), 897-933.
- Pintrich, P. R. (2000). The role of goal orientation in self-regulated learning. In M. Boekaerts, P. R. Pintrich, & M. Zeidner, (Eds.), *Handbook of self-regulation: Theory, research, and applications* (pp. 451-502). San Diego, CA: Academic Press.
- Pintrich, P. R., Conley, A. M., & Kempler, T. M. (2003). Current issues in achievement goal theory and research. *International Journal of Educational Research*, 39, 319-337.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioural research: a critical review of the literature and recommended remedies. *Journal of applied psychology*, 88(5), 879.
- Podsakoff, P., Mackenzie, S., Moorman, R., & Fetter, R. (1990). Transformational leader behaviours and their effects on followers' trust in leader, satisfaction, and organizational citizenship behaviours. *Leadership Quarterly*, 1, 107-142.
- Podsakoff, P. M., MacKenzie, S. B., Paine, J. B., & Bachrach, D. G. (2000). Organizational citizenship behaviours: A critical review of the theoretical and empirical literature and suggestions for future research. *Journal of Management*, 26(3), 513-563.
- Poortvliet, P. M., Janssen, O., Van Yperen, N. W., & Van de Vliert, E. (2007). Achievement goals and interpersonal behaviour: How mastery and performance goals shape information exchange. *Personality and Social Psychology Bulletin*, 33, 1435-1447.
- Popper, M., & Lipshitz, R. (2000). Installing mechanisms and instilling values: the role of leaders in organizational learning. *The Learning Organization*, 7(3), 135-44.
- Popper, M. & Lipshitz, R. (1998). Organizational learning mechanisms a structural and cultural approach to organizational learning. *The Journal of Applied Behavioral Science*, 34, 161-179.
- Porath, C. L., & Bateman, T. S. (2006). Self-regulation: From goal orientation to job performance. *Journal of Applied Psychology*, 91, 185-192.
- Porter, C. O. L. H. (2008). A multilevel, multiconceptualization perspective of goal orientation in teams. In V. I. Sessa, & M. London (Eds.), *Work group learning: Understanding and assessing how groups learn in organizations* (pp. 149-173). New York: Taylor & Francis.
- Preenen, P., van Vianen, A., & de Pater, I. (2014). Challenging tasks: The role of employees' and supervisors' goal orientations. *European Journal of Work and Organizational Psychology*, 23(1), 48-61.

- Redmond, M. R., Mumford, M. D., & Teach, R. (1993). Putting creativity to work: Effects of leader behaviour on subordinate creativity. *Organizational Behaviour and Human Decision Processes*, 55, 120-51.
- Rempel, J. K., Holmes, J. G., & Zanna, M. D. (1985). Trust in close relationships. *Journal of Personality and Social Psychology*, 49, 95-112.
- Rosenberg, T., & Wilbrandt, W. (1957). Uphill transport induced by counterflow. *The Journal of general physiology*, 41(2), 289-296.
- Rotter, J. B. (1967). A new scale for the measurement of interpersonal trust. *Journal of Personality*, 35, 651-665.
- Rotter, J. B. (1971). Generalized expectancies for interpersonal trust. *American Psychologist*, 35, 1-7.
- Rousseau, D. M., Sitkin, S. B., Burt, R. S., & Camerer, C. (1998). Not so different after all: A cross-discipline view of trust. *Academy of Management Review*, 23, 393-400.
- Salaman, G., Storey, J., & Billsberry, J. (Eds.). (2005). *Strategic human resource management: Theory and practice*. Sage.
- Salas, E. E., & Fiore, S. M. (2004). *Team cognition: Understanding the factors that drive process and performance*. Washington, DC: American Psychological Association.
- Sarantakos, S. (2005). *Social research*. (3rd ed.). Melbourne: Macmillan Education.
- Sarros, J. C., Tanewski, G. A., Winter, R. P., Santora, J. C., & Densten, I. L. (2002). Work alienation and organizational leadership. *British Journal of Management*, 13(4), 285-304.
- Sarin, S., & Mahajan, V. (2001). The effect of reward structure on the performance of cross-functional product development teams. *Journal of Marketing*, 65, 35-53.
- Schein, E. H. (1992). *Organizational culture and leadership*. San Francisco, CA: Jossey-Bass.
- Schreiber, J. B., Nora, A., Stage, F. K., Barlow, E. A., & King, J. (2006). Reporting structural equation modeling and confirmatory factor analysis results: A review. *The Journal of Educational Research*, 99(6), 323-338.
- Science Buddies – Science Fair Projects. (2017). Retrieved from <https://www.sciencebuddies.org/science-fair-projects>
- Scott, B. B. (2011). *Organizational learning: A literature review*. Queens University, 1-24.

- Seaver, D. S. (2010). Effect of transformational leadership in a cross cultural organization: a case study. (Dissertation) Capella University.
- Senge, P. (1990). *The fifth discipline*. New York, NY: Doubleday.
- Senge, P., Roberts, C., Ross, R. B., Smith, B. J., & Kleiner, A. (1994). *The fifth discipline field book*. New York, NY: Doubleday.
- Shaughnessy, J. J., & Zechmeister, E. B. (1985). *Research methods in psychology*. Alfred A. Knopf.
- Shure, G. H., & Meeker, R. J. (1967). A personality/attitude schedule for use in experimental bargaining studies. *The Journal of Psychology*, 65(2), 233-252.
- Silins, H. C., Mulford, W. R., & Zarins, S. (2002). Organizational learning and school change. *Educational Administration Quarterly*, 38(5), 613-642.
- Simon, H. A. (1991). Bounded rationality and organizational learning. *Organization Science*, 2(1), 125-134.
- Simons, T. L., & Peterson, R. S. (2000). Task conflict and relationship conflict in top management teams: The pivotal role of intragroup trust. *Journal of Applied Psychology*, 85(1), 102-111.
- Singh, P., Tomer, N. S., Kumar, S., & Sinha, D. (2010). MHD oblique stagnation-point flow towards a stretching sheet with heat transfer. *International Journal of Applied Mathematics and Mechanics*, 6(13), 94-111.
- Sitkin, S. B. (1992). Learning through failure: The strategy of small losses. In B. M. Staw, & L. L. Cummings (Eds.), *Research in organizational behaviour* (pp. 231-266).
- Skogstad, A., Einarsen, S., Torsheim, T., Aasland, M. S., & Hetland, H. (2007). The destructiveness of laissez-faire leadership behaviour. *Journal of Occupational Health Psychology*, 12(1), 80-92.
- Slater, S. F., & Narver, J. C. (1995). Market orientation and the learning organization. *Journal of Marketing*, 59(3), 63-74.
- Sosik, J. J., Avolio, B. J., & Kahai, S. S. (1997). The impact of leadership style and anonymity on group potency and effectiveness in a GDSS environment. *Journal of Applied Psychology*, 82, 89-103.
- Speechley, C. (2005). The changing nature of leadership. *Measuring Business Excellence*, 9(1), 46-52.
- Stipek, D. J., & Kowalski, P. S. (1989). Learned helplessness in task orienting versus performance orienting testing conditions. *Journal of Educational Psychology*, 81, 384-391.

- Stogdill, R. M. (1963). *Manual for leadership description questionnaire form XII*. Columbus, OH: The Ohio State University Bureau of Business Research.
- Stoeber, J., Stoll, O., Pescheck, E., & Otto, K. (2008). Perfectionism and achievement goals in athletes: Relations with approach and avoidance orientations in mastery and performance goals. *Psychology of Sport and Exercise*, 9(2), 102-121.
- Sung, S. Y., & Choi, J. N. (2014). Do organizations spend wisely on employees? Effects of training and development investments on learning and innovation in organizations. *Journal of organizational behavior*, 35(3), 393-412.
- Svetlik, I., Stavrou-Costea, E., & Lin, H.-F. (2007). Knowledge sharing and firm innovation capability: an empirical study. *International Journal of Manpower*, 28, 315-332.
- Swanson, R. A., & Holton, E. F. (2001). *Foundations of human resource development*. Berrett-Koehler Publishers.
- Swieringa, J., & Wierdsma, A. (1992). *Becoming a learning organization*. Reading, MA: Addison-Wesley.
- Szulanski, G., Cappetta, R., & Jensen, R. J. (2004). When and how trustworthiness matters. *Organization Science*, 1, 600-613.
- Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics*. Allyn & Bacon/Pearson Education.
- Thoresen, C. J., Bradley, J. C., Bliese, P. D., & Thoresen, J. D. (2004). The big five personality traits and individual job performance growth trajectories in maintenance and transitional job stages. *Journal of Applied Psychology*, 89, 835-853.
- Tichy, N. M., & Devanna, M. A., III. (1986). *The transformational leader*. New York: Wiley.
- Tichy, N. M., & Ulrich, D. O. (1984). SMR forum: The leadership challenge—a call for the transformational leader. *Sloan Management Review*, 26, 59-68.
- Tierney, P., Farmer, S. M., & Graen, G. B. (1999). An examination of leadership and employee creativity: The relevance of traits and relationships. *Personnel Psychology*, 52, 591-620.
- Tohidi, H., Mohsen Seyedaliakbar, S., & Mandegari, M. (2012). Organizational learning measurement and the effect on firm innovation. *Journal of Enterprise Information Management*, 25, 219-245.
- Tucker, A. L., & Edmondson, A. C. (2003). Why hospitals don't learn from failures: Organizational and psychological dynamics that inhibit system change. *California Management Review*, 45, 55-72.

- Tucker, A. L., Nembhard, I. M., & Edmondson, A. C. (2007). Implementing new practices: An empirical study of organizational learning in hospital intensive care units. *Management Science*, 53, 894-907.
- Tushman, M. L., & Nadler, D. A. (1986). Organizing for innovation. *California Management Review*, 28(3), 74-92.
- Tushman, M. L., & O'Reilly, C. A. (2002). *Winning through innovations*. Boston: Harvard Business School Press.
- UAE Vision (2021). Retrieved from <http://www.vision2021.ae>
- U.S.-U.A.E. Business Council. (2014). The U.A.E. Healthcare Sector. Retrieved from <http://www.usuaebusiness.org>
- Ulin, P. R., Robinson, E. T., & Tolley E. E. (2004). *Qualitative methods in public health: A field guide for applied research*. San Francisco: Jossey-Bass.
- Ulrich, D., Von Glinow, M. A., & Jick, T. (1993). High-impact learning: building and diffusing learning capability. *Organizational Dynamics*, 22(2), 52-66.
- Urduan, T., Ryan, A. M., Anderman, E. M., & Gheen, M. H. (2002). Goals, goal structures, and avoidance behaviours. In C. Midgley (Ed.), *Goals, goal structures, and patterns of adaptive learning* (pp. 55-83). Mahwah, NJ: Lawrence Erlbaum.
- Van Yperen, N. W. (2006). A novel approach to assessing achievement goals in the context of the 2 9 2 achievement goal framework: Identifying distinct profiles of individuals with different dominant achievement goals. *Personality and Social Psychology Bulletin*, 32, 1432-1445.
- Van Yperen, N. W., Hamstra, M. R. W., & van der Klauw, M. (2011). To win, or not to lose, at any cost: The impact of achievement goals on cheating. *British Journal of Management*, 22, S5-S15.
- VandeWalle, D. (1997). Development and validation of a work domain goal orientation instrument. *Educational and Psychological Measurement*, 8, 995-1015.
- VandeWalle, D., Cron, W. L., & Slocum, J. W. (2001). The role of goal orientation following performance feedback. *Journal of Applied Psychology*, 86, 629-640.
- Vera, D., & Crossan, M. (2003). Organizational learning and knowledge management: Toward an integrative framework. In M. Easterby-Smith & M. Lyles (Eds.), *Handbook of organizational learning* (pp. 122-141).
- Vera, D., & Crossan, M. (2004). Strategic leadership and organizational learning. *Academy of Management Review*, 29(2), 222-240.

- Vroom, V., & Yetton, P. (1974). *Leadership and decision-making*. Pittsburgh, PA: University of Pittsburgh Press.
- Waldman, D. A., & Yammarino, F. J. (1999). CEO charismatic leadership: Levels-of-management and levels-of-analysis effects. *Academy of Management Review*, 24, 266-285.
- Walumbwa, F. O., Avolio, B. J., Gardner, W. L., Wernsing, T. S., & Peterson, S. J. (2008). Authentic leadership: Development and validation of a theory-based measure. *Journal of Management*, 34(1), 89-126.
- Walumbwa, F. O., Luthans, F., Avey, J. B., & Oke, A. (2011). Retracted: Authentically leading groups: The mediating role of collective psychological capital and trust. *Journal of Organizational Behaviour*, 32(1), 4-24.
- Ward, C., Bochner, S., & Furnham, A. (2001). *The psychology of culture shock*. Philadelphia: Routledge.
- Weaver, R. G., & Farrel, J. D. (1997). *Managers as facilitators*. San Francisco, CA: Berret-Koehler.
- Weldy, T. G., & Gillis, W. E. (2010). The learning organization: variations at different organizational levels. *The Learning Organization*, 17, 455-470.
- West, M. A. (2001). The human team: Basic motivations and innovations. In N. Anderson, D. S. Ones, H. K. Sinangil & C. Viswesvaran (Eds.), *Handbook of industrial, work, and organizational psychology* (pp. 270-288). London: Sage Publications.
- West, M. A., & Richter, A. (2008) Climate and cultures for innovation and creativity at work. In J. Zhou, & C. E. Shalley (Eds.), *Handbook of organizational creativity* (pp. 211-236). New York, NY: Taylor & Francis.
- Wrightman Jr, L. S. (1964). Measurement of philosophies of human nature. *Psychological Reports*, 14(3), 743-751.
- Yukl, G. (1998). *Leadership in organizations*. Englewood Cliffs, NJ: Prentice-Hall.
- Yukl, G. (2001). *Leadership in organizations*. Upper Saddle River, NJ: Prentice-Hall.
- Yukl, G. (2002). *Leadership in organizations*, 5th edn. New York: Prentice-Hall.
- Yukl, G. (2009). Leading organizational learning: Reflections on theory and research. *The Leadership Quarterly*, 20(1), 49-53.
- Yukl, G., & Lepsinger, R. (2004). *Flexible leadership: Creating value by balancing multiple challenges and choices* (Vol. 223). John Wiley & Sons.
- Yukl, G. A., & Becker, W. S. (2006). Effective empowerment in organizations. *Organization Management Journal*, 3(3), 210-231.

- Zagoršek, H., Dimovski, V., & Škerlavaj, M. (2009). Transactional and transformational leadership impacts on organizational learning. *Journal for East European Management Studies*, 144-165.
- Zander, R. S., & Zander, B. (2000). *The art of possibility: Transforming professional and personal life*. Cambridge, MA: Harvard Business School Press.
- Zhao, X., Lynch Jr, J. G., & Chen, Q. (2011). Reconsidering Baron and Kenny: Myths and truths about mediation analysis. *Journal of Consumer Research*, 37(2), 197-206.
- Zhou, J. (2003). When the presence of creative coworkers is related to creativity: Role of supervisor close monitoring, developmental feedback, and creative personality. *Journal of Applied Psychology*, 88, 413-422.
- Zollo, M. & Winters, S. G. (2002). Deliberate learning and the evolution of dynamic capabilities. *Organization science*, 13, 339-351.



## Appendices

### Appendix 1: Research Survey

#### **The Impact of Transformational and Transactional leadership styles on organizational learning at Health Care Context**

*Dear Respondent:*

I invite you to participate in a research study entitled “The Impact of Transformational and Transactional leadership styles on organizational learning at Abu Dhabi Health Care organizations”. I am currently enrolled in the Doctorate Program at the United Arab Emirates’ University and I am in the process of writing my doctorate dissertation. The primary purpose of this research is to examine the role of leadership styles in promoting organization learning in the context of health care organizations in Abu Dhabi. The research will help policy makers and decision makers to adapt such leadership practices which will be helpful in enhancing organizational learning.

Enclosed with this letter a brief questionnaire that asks a variety of questions about your perceptions of leadership and work environment. Please take few minutes to answer each question on the survey as completely and accurately as possible. There is no right and wrong answer. Your responses will be processed with full confidentiality and only group data will be used to draw inferences and conclusion. No one other than the researcher will know your individual answers to this questionnaire and also you can withdraw at any time from the research study.

If you have any questions regarding the survey or would like a copy of the survey results, please contact me on: [nmjabri@seha.ae](mailto:nmjabri@seha.ae)

Thanks for taking the time to assist me in my educational endeavors

*Sincerely,*

*Nadia Al Jabri*

*DBA student*

*UAE University*

*April, 2017*

## دور القيادة التحويلية و القيادة التبادلية على التعلم المؤسسي في سياق الرعاية الصحية

عزيزي المشارك/ عزيزتي المشاركة :

أدعوك للمشاركة في دراسة بحثية بعنوان (دور القيادة التحويلية و القيادة التبادلية على التعلم المؤسسي في سياق الرعاية الصحية في إمارة أبوظبي). اعمل حالياً على نيل درجة الدكتوراه و بصدد كتابة اطروحتي الخاصة، و التي تهدف إلى تحديد دور القائد في تسهيل عملية التعلم المؤسسي. ووفقاً لذلك، سوف يتم تقديم التوصية بالأدوات والسياسات المثمرة لخبراء الموارد البشرية وصناع القرار عن طريق خلق بيئة عمل جاذبة للقادة و للموظفين ، تعمل على تشجيع المسؤولين و الموظفين للمشاركة في عملية تطوير سبل التعليم المؤسسي عن طريق تفعيل سبل القيادة الفعالة .

ستجد مع هذه الرسالة استبيان مقتضب يطرح مجموعة متنوعة من الأسئلة حول موقفك تجاه مسؤولك المباشر أو قائدك. أرجو أن تمنحه بضع دقائق من وقتك للإجابة على كل سؤال في الاستبيان بشكل كامل ودقيق بقدر الإمكان. ولضمان خصوصيتكم، سيتم التعامل مع ردودكم بطريقة سرية، بينما ستتاح بيانات المجموعة فقط، كما أنه لن يقوم أي احد بالاطلاع على إجاباتك الفردية في هذا الاستبيان سوى الباحث ، بالإضافة إلى أن الموظف يستطيع الانسحاب من المشاركة في هذه الدراسة في أي وقت يشاء.

إذا كانت لديك أية أسئلة بخصوص الدراسة، أو تريد الحصول على نسخة من نتائج الدراسة، يرجى التواصل على عنوان البريد الإلكتروني nmjabri@seha.ae

شكراً لمنحي وقتك لمساعدتي في جهودي التعليمية .

مع فائق الاحترام والتقدير،

نادية مترف الجابري

طالبة دكتوراه في إدارة الأعمال، جامعة الإمارات

أبريل، 2017

<b>Gender:</b>	<input type="checkbox"/> أنثى	<input type="checkbox"/> ذكر	<b>النوع:</b>		
	<input type="checkbox"/> Female	<input type="checkbox"/> Male			
<b>Age Category</b>	<input type="checkbox"/> Less than 25 <input type="checkbox"/> 25-30 <input type="checkbox"/> 31-34 <input type="checkbox"/> 35-40 <input type="checkbox"/> 41-44 <input type="checkbox"/> 45-50 <input type="checkbox"/> 51-54 <input type="checkbox"/> 55 and above				<b>الفئة العمرية</b>
	<input type="checkbox"/> أقل من 25 <input type="checkbox"/> 25-30 <input type="checkbox"/> 31-34 <input type="checkbox"/> 35-40 <input type="checkbox"/> 41-44 <input type="checkbox"/> 45-50 <input type="checkbox"/> 51-54 <input type="checkbox"/> فما فوق 55				
<b>Marital Status:</b>	<input type="checkbox"/> أخرى	<input type="checkbox"/> متزوج	<input type="checkbox"/> أعزب	<b>الحالة الاجتماعية:</b>	
	<input type="checkbox"/> Others	<input type="checkbox"/> Married	<input type="checkbox"/> Single		
<b>Highest Qualification:</b>	<input type="checkbox"/> بكالوريوس	<input type="checkbox"/> دبلوم/دبلوم عالي	<input type="checkbox"/> الثانوية العامة	<b>أعلى مؤهل علمي:</b>	
	<input type="checkbox"/> Bachelor	<input type="checkbox"/> Diploma/HD	<input type="checkbox"/> High School		
	<input type="checkbox"/> Higher Education Master/ Doctorate)	<input type="checkbox"/> الدراسات العليا (ماجستير/ دكتوراة)			
<b>Experience (Current Employer):</b>	<input type="checkbox"/> أكثر من 10 سنوات	<input type="checkbox"/> 10-7 سنوات	<input type="checkbox"/> 6-4 سنوات	<input type="checkbox"/> أقل من 3 سنوات	<b>الخبرة (المؤسسة الحالية):</b>
	<input type="checkbox"/> More than 10 Years	<input type="checkbox"/> 7-10 Years	<input type="checkbox"/> 4-6 Years	<input type="checkbox"/> Less than 3 Years	
<b>Total Years of Experience</b>	<input type="checkbox"/> أكثر عن 15 سنة	<input type="checkbox"/> 15-10 سنوات	<input type="checkbox"/> 9-4 سنوات	<input type="checkbox"/> أقل عن 3 سنوات	<b>مجموع سنوات الخبرة:</b>
	<input type="checkbox"/> more than 15 years	<input type="checkbox"/> 10-15 Years	<input type="checkbox"/> 4-9 Years	<input type="checkbox"/> Less than 3 Years	

## - القسم الأول:

تتمحور العبارات التالية حول شعورك/ سلوكك في العمل مع مسؤولك المباشر. يرجى قراءة كل عبارة بعناية وتحديد ما إذا شعرت في أي وقت من الأوقات بهذا الشعور/ قمت بهذا السلوك في عملك مع مسؤولك المباشر.

## - Section 1:

The following statements are about how you feel about your relation with your direct senior in the work place. Kindly respond to the below statements by considering your direct senior:

1	2	3	4	5
إطلاقاً	نادراً	أحياناً	غالباً	دائماً
Never	Rarely	Sometimes	Often	Always

Items	البنود	1	2	3	4	5
		إطلاقاً	نادراً	أحياناً	غالباً	دائماً
		Never	Rarely	Sometimes	Often	Always
1.	My direct senior articulates a compelling vision of the future	مسؤولي المباشر يتكلم عن تصوره للمستقبل بصورة مقنعة				
2.	My direct senior instils pride in me for being associated with him/her	مسؤولي المباشر يبعث في نفسي الفخر بأنني أعمل معه				
3.	My direct senior goes beyond self-interest for the good of the group	مسؤولي المباشر يعطي الأولوية لمصلحة الجماعة على مصلحة الشخصية				
4.	My direct senior treats me as an individual rather than just as a member of a group	مسؤولي المباشر يعامل كل فرد كشخص متميز وليس مجرد فرد في الجماعة				
5.	My direct senior considers me as having different needs, abilities, and aspirations from others	مسؤولي المباشر يأخذ بعين الاعتبار اختلاف قدراتي واحتياجاتي وطموحاتي عن الآخرين				
6.	My direct senior gets me to look at problems from many different angles	مسؤولي المباشر يجعلني أنظر للمشاكل من زوايا كثيرة				
7.	My direct senior helps me to develop my strengths	مسؤولي المباشر يساعدي في تطوير نقاط قوتي				
8.	My direct senior suggests new ways of looking at how to complete assignments	مسؤولي المباشر يقترح طرق جديدة لكيفية إنجاز المهام				
9.	My direct senior emphasizes the importance of having a collective sense of mission	مسؤولي المباشر يؤكد على أهمية وجود توجه مشترك لتحقيق رسالة المؤسسة و أهدافها				
10.	My direct senior expresses confidence that goals will be achieved	مسؤولي المباشر يظهر الثقة بأن الأهداف سوف تتحقق				
11.	My direct senior gets me to do more than I expected to do	مسؤولي المباشر يجعلني أنجز أعمالاً أكثر مما أتوقع				
12.	My direct senior heightens my desire to succeed	مسؤولي المباشر يرفع رغبتني بالنجاح				
13.	My direct senior increases my willingness to try harder	مسؤولي المباشر يزيد رغبتني لبذل مجهود أكبر				
14.	My direct senior directs my attention toward failures to meet standards	مسؤولي المباشر يوجه انتباهي للأخطاء من أجل المحافظة على مستوى العمل المطلوب				

## - القسم الثاني:

تتمحور العبارات التالية حول شعورك/ سلوكك في العمل مع مسؤولك المباشر. يرجى قراءة كل عبارة بعناية وتحديد ما إذا شعرت في أي وقت من الأوقات بهذا الشعور/ قمت بهذا السلوك في عملك مع مسؤولك المباشر.

## - Section 2:

The following statements are about how you feel about your relation with your direct senior in the work place. Kindly respond to the below statements by considering your direct senior:

1	2	3	4	5
إطلاقاً	نادراً	أحياناً	غالباً	دائماً
Never	Rarely	Sometimes	Often	Always

Items	البنود	1	2	3	4	5
		إطلاقاً	نادراً	أحياناً	غالباً	دائماً
		Never	Rarely	Sometimes	Often	Always
1.	My direct senior provides me with assistance in exchange for my efforts	مسؤولي المباشر يقدم لي المساعدة مقابل مجهودي				
2.	My direct senior fails to interfere until problems become serious	مسؤولي المباشر لا يتدخل إلا عندما تصبح المشاكل كبيرة				
3.	My direct senior discusses in specific terms who is responsible for achieving performance targets	مسؤولي المباشر يناقش بعبارات محددة من هو المسؤول عن تحقيق الأهداف				
4.	My direct senior waits for things to go wrong before taking action	مسؤولي المباشر ينتظر حتى وقوع الأخطاء ثم يبادر في حلها				
5.	My direct senior shows that he/she is a firm believer in "If it isn't broke, don't fix it."	مسؤولي المباشر يؤمن بفكرة " إن لم يكن مكسور لا تصلحه " أي لا تغير أي شيء طالما أنه يعمل				
6.	My direct senior demonstrates that problems must become chronic before taking action	مسؤولي المباشر لا يتخذ أي قرار إلا بعد أن تصبح المشاكل مزمنة				
7.	My direct senior avoids making decisions	مسؤولي المباشر يتجنب اتخاذ القرارات				
8.	My direct senior makes clear what one can expect to receive when performance goals are achieved	مسؤولي المباشر يوضح المرود المتوقع الذي سيحصل عليه أي فرد عند تحقيق الأهداف				
9.	My direct senior concentrates his/her full attention on dealing with mistakes, complaints, and failures	مسؤولي المباشر يركز كل اهتمامه للتعامل مع الأخطاء و الشكاوي و الإخفاقات				
10.	My direct senior delays responding to urgent questions	مسؤولي المباشر يتأخر في الإجابة على الأسئلة العاجلة				
11.	My direct senior keeps track of all mistakes	مسؤولي المباشر يتتبع جميع الأخطاء				
12.	My direct senior is effective in meeting my job-related needs	مسؤولي المباشر هو فعال في تلبية تحقيق احتياجاتي في العمل				

## - القسم الثالث:

إلى أي مدى يشكل كل بند أولوية بالنسبة لك في عملك؟

يرجى الرد على المشار إليه أدناه لتوضيح أهميته بحسب الخانات الخمس ابتداءً من الأقل أهمية (1) للدلالة على أنه ليس مهم على الإطلاق ووصولاً إلى الأكثر أهمية (5) للدلالة على أنه مهم جداً و ذلك عن طريق وضع علامة ✓.

## - Section 3:

**To what extent is each item a priority for you in your work?**

Kindly respond to the below indicating the importance of the same using a five-point Likert-type scale with anchors (1) to a small extent that is not at all important to (5) a large extent, that is very important using (✓).

1	2	3	4	5
ليس مهماً على الإطلاق	مهم قليلاً	مهم	مهم إلى حد ما	مهم جداً
Not at all important	Slightly important	Important	Fairly important	Very important



Items	البنود	الأهمية					
		1	2	3	4	5	
		ليس مهم على الإطلاق	مهم قليلاً	مهم	مهم جداً	مهم جداً	
		Not at all important	Slightly important	Important	Fairly important	Very important	
1.	The opportunity to do challenging work is important to me	الفرصة للقيام بتحديات في العمل مهمة بالنسبة لي					
2.	When I fail to complete a difficult task, I plan to try harder the next time I work on it.	عندما أفشل في إتمام مهمة صعبة أعمل على التخطيط لبذل جهد أكبر في المرة القادمة.					
3.	I prefer to work on tasks that force me to learn new things.	أنا أفضل العمل على المهام التي تجبرني على تعلم أشياء جديدة.					
4.	I do my best when I'm working on a fairly difficult task.	أنا أبذل قصارى جهدي عندما أعمل على أداء مهمة صعبة.					
5.	I try hard to improve on my past performance.	أحاول و أعمل على تحسين أدائي الوظيفي بشكل أفضل من العام السابق					
6.	When I have difficulty solving a problem, I enjoy trying different approaches to see which one will work.	عندما أجد صعوبة في حل مشكلة ما ، استمتع في استخدام عدة طرق مختلفة لاكتشاف الطريقة الصحيحة لحل المشكلة.					
7.	I prefer to do things that I can do well rather than things that I do poorly.	أنا أفضل أن أعمل الأشياء التي يمكنني القيام بها بشكل جيد بدلاً من الأشياء التي لا اتقنها					
8.	I'm happiest at work when I perform tasks on which I know that I won't make any errors.	أكون سعيدة بتكرار عمل المهام التي لا أخطأ فيها					
9.	The things I enjoy the most are the things I do the best.	الأشياء التي استمتع بالعمل بها هي الأشياء التي كنت أبذل فيها قصارى جهدي					
10.	The opinions others have about how well I can do certain things are important to me.	آراء الآخرين عن مدى قدرتي على القيام بالمهام مهمة بالنسبة لي					
11.	I feel smart when I do something without making any mistakes.	أشعر بالذكاء عندما أقوم بالمهام بدون أخطاء					
12.	I like to work on tasks that I have done well on in the past.	أحب أن أعمل في المهام التي قمت بها بشكل جيد في الماضي					
13.	When I study online I don't interact with my teacher	عندما أدرس إلكترونياً لا أستطيع التواصل المباشر مع المعلم					
14.	I feel frustrated when I attend lecture online	أشعر بعدم التركيز عندما احضر محاضرة إلكترونية					

## - القسم الرابع:

يرجى تحديد مستوى موافقتك على العبارات أدناه التي تتعلق بعملك الحالي و مؤسستك و قناعاتك بوضع علامة ✓:

## - Section4:

On a scale of 1-5 kindly indicate your level of agreement on the below statements with relation to your current job and general beliefs by ticking the appropriate box ✓:

1	2	3	4	5
لا أؤيد بشدة	لا أؤيد	عادي	أؤيد	أؤيد بشدة
<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Natural</b>	<b>Agree</b>	<b>Strongly Agree</b>
<b>SD</b>	<b>D</b>	<b>N</b>	<b>A</b>	<b>SA</b>

Items	البندود	1	2	3	4	5
		لا أؤيد بشدة	لا أؤيد	عادي	أؤيد	أؤيد بشدة
		SD	D	N	A	SA
1.	I'm not afraid to express my opinions at work.	لا أخاف من التعبير عن آرائي في العمل				
2.	I am not afraid to be myself at work	لا أخاف أن أكون على طبيعتي في العمل				
3.	The environment at my work is not threatening.	بيئة العمل مريحة للتعبير عن الآراء ووجهات النظر				
4.	I feel personally attached to my work organization.	أشعر شخصياً بأنني مرتبط بعلمي في المؤسسة				
5.	No one in the workplace deliberately act in a way to undermine my effort	لا يوجد أشخاص في بيئة العمل يتعمدون الانتقاص من جهودي في العمل				
6.	If you make a mistake in the workplace, it is not held against you	إذا قمت بارتكاب خطأ في العمل فإنها لا تحسب ضدي.				

- القسم الخامس:

يرجى قراءة كل عبارة بعناية وتحديد ما إذا شعرت في أي وقت من الأوقات بهذا الشعور/ قمت بهذا السلوك في عملك مع مسؤولك المباشر.

- Section 5:

Please answer the following statements keeping in view you current Senior.

1	2	3	4	5
إطلاقاً	نادراً	أحياناً	غالباً	دائماً
Never	Rarely	Sometimes	Often	Always

Items	البنود	1	2	3	4	5
		إطلاقاً	ناراً	أحياناً	غالباً	دائماً
		Never	Rarely	Sometimes	Often	Always
1.	I trust and respect my direct senior	أنا أثق واحترم مسؤولي المباشر				
2.	My direct senior approaches his/her job with professionalism and dedication	مسؤولي المباشر يؤدي المهام بطريقة مهنية واحترافية عالية الدقة				
3.	I have a sharing relationship with my direct senior, that I can freely share my ideas, feelings, and hopes with my him/her	لدي علاقة تبادل ومشاركة مع مسؤولي المباشر حيث أنني أستطيع أن أعبّر عن أفكاري و آرائي و اهتماماتي و طموحاتي معه.				
4.	I can freely talk to my direct senior about difficulties I am having at work and I know that she/he will listen	أستطيع التحدث بحرية مع مسؤولي المباشر عن أية صعوبات تواجهني في العمل و أنا أثق بأنه سوف يستمع لي				
5.	If I shared my problems with my direct senior, I know she/he would respond constructively and caringly.	عندما أخبر مسؤولي المباشر بأية مشكلات تواجهني في عملي فأنا أعلم بأنه سوف يأخذها بعين الاعتبار و سوف يحاول مساعدتي				
6.	We would both feel a sense of loss if one of us was transferred and we could no longer work Together	سوف يشعر كلانا بالخسارة إذا تم نقل أحدهما لقسم آخر و لم نتمكن من العمل معاً مجدداً				
7.	Most people, even those who aren't close of my direct senior, trust and respect him/her as a coworker	أغلب الموظفين يحترمون مسؤولي المباشر كزميل عمل حتى الذين لا يعملون معه مباشرة				
8.	Other work associates of mine who must interact with my direct senior consider him/her to be trustworthy	زملائي في العمل الذين يتواصلون أو يتعاملون مع مسؤولي المباشر بخصوص العمل يعتبرونه مصدر ثقة				
9.	I can trust my direct senior to make sensible decisions for the future of the organization.	أشعر بالثقة بمسؤولي المباشر لاتخاذ قرارات حكيمة لمستقبل المؤسسة				
10.	I feel quite confident that my direct senior will always try to treat me fairly.	أثق تماماً بأن مسؤولي المباشر دائماً سيعاملني بطريقة منصفة				
11.	My direct senior would not deceive me for his/her own benefit	مسؤولي المباشر لن يقوم بخداعي لخدمة لمصلحته الشخصية				
12.	My direct senior can be relied on to uphold my best interests.	يمكنني الاعتماد على مسؤولي المباشر لتقديم الدعم لي				

## -القسم السادس:

يرجى تحديد مستوى موافقتك على العبارات أدناه التي تتعلق بعملك الحالي و مؤسساتك و قناعاتك بوضع علامة  
✓:

## - Section 6:

On a scale of 1-5 kindly indicate your level of agreement on the below statements with relation to your current job and employer and general beliefs by ticking the appropriate box✓:

1	2	3	4	5
لا أؤيد بشدة	لا أؤيد	عادي	أؤيد	أؤيد بشدة
<b>Strongly Disagree SD</b>	<b>Disagree D</b>	<b>Natural N</b>	<b>Agree A</b>	<b>Strongly Agree SA</b>

Items	البنسود	1	2	3	4	5	
		لا أؤيد بشدة	لا أؤيد	عادي	أؤيد	أؤيد بشدة	
		SD	D	N	A	SA	
1.	The direct seniors frequently involve their staff in important decision making processes.	كثيرا ما يقوم المسؤول المباشر بمشاركة موظفيه في اتخاذ القرارات الهامة.					
2.	Employee learning is considered as an investment in this organization.	تعتبر هذه المؤسسة تعلم الموظف استثمار للموظف و ربح للمؤسسة .					
3.	The organizations' management looks favorably on carrying out changes in any area to adapt to and/or keep ahead of new environmental situations.	تقوم المؤسسة بشكل إيجابي في إجراء التغييرات في أي مجال للتكيف مع الأوضاع الجديدة و مواكبة التغييرات و المتطلبات الحديثة.					
4.	Employee learning capability is considered a key factor in this organization.	قدرة التعلم لدى الموظفين تعتبر عاملا مهم للنجاح في هذه المؤسسة					
5.	In this organization, innovative ideas that work are rewarded	في هذه المؤسسة يتم مكافأة الافكار المبتكرة					
6.	All employees have generalized knowledge regarding this organizations' Objectives	يتم تعميم أهداف المؤسسة على جميع الموظفين					
7.	All parts that make up this organization (departments, sections, work teams, and individuals) are well aware of how they contribute to achieving the overall objectives.	جميع الأطراف التي تشكل هذه المؤسسة (الإدارات ، الأقسام ، فرق العمل و الأفراد ) يدركون تماما كيف يساهمون معا في تحقيق أهداف المؤسسة.					
8.	All parts that make up this organization are interconnected, working together in a coordinated fashion.	جميع الأطراف التي تشكل هذه المؤسسة تعمل معا بطريقة مترابطة و بشكل منسق					
9.	This organization promotes experimentation and innovation as a way of improving the work processes	تشجع المؤسسة التجارب المبتكرة كوسيلة لتطوير إجراءات العمل					
10.	This organization follows up what other organizations in the sector are doing; adopting those practices and techniques it believes to be useful and interesting.	تقوم هذه المؤسسة باتباع ما تقوم به مؤسسات أخرى في نفس المجال ، و اعتماد تلك الممارسات و التقنيات التي تعتقد بانها مفيدة و مثيرة للاهتمام					
11.	Experiences and ideas provided by external sources (advisors, customers, training firms, etc.) are considered a useful instrument for this organizations' learning.	تعتبر التجارب و الأفكار التي تقدمها المصادر الخارجية (المستشارين ، العملاء ، شركات التدريب ، وما إلى ذلك ) أداة مفيدة للتعلم في هذه الشركة					
12.	Part of this organizations' culture is that employees can express their opinions and make suggestions regarding the procedures and methods in place for carrying out tasks.	جزء من ثقافة هذه المؤسسة هو ان الموظفين يمكنهم التعبير عن آرائهم و تقديم الاقتراحات بشأن الإجراءات و الأساليب المتبعة لأداء المهام					

Items	البند	1	2	3	4	5
		لا أؤيد بشدة	لا أؤيد	عادي	أؤيد	أؤيد بشدة
		SD	D	N	A	SA
13.	Errors and failures are always discussed and analyzed in this organization, on all levels.	يتم دائما مناقشة الأخطاء و تحليلها على جميع المستويات في هذه المؤسسة				
14.	Employees have the chance to talk among themselves about new ideas, programs, and activities that might be of use to the organization.	الموظفين لديهم فرصة للتحدث فيما بينهم عن الأفكار والبرامج والأنشطة الجديدة التي قد تكون ذات فائدة للمؤسسة.				
15.	In this organization, teamwork is the usual way to work	في هذه المؤسسة العمل الجماعي ضمن الفريق هو الأسلوب المعتمد للعمل				
16.	The organization has instruments (manuals, databases, files, organizational routines, etc.) that allow what has been learnt in past situations to remain valid, although the employees are no longer the same.	هذه المؤسسة تمتلك أدوات مرجعية (كتيبات، و قواعد بيانات، و ملفات، و تنظيمات روتينية و ما إلى ذلك ) حتى يتم حفظ ما تم تعلمه في السابق من أجل أن يكون مرجع للموظفين في حال تغييرهم.				
17.	I am concerned that my financial records might not be adequately protected if I shop online.	أنا متخوف من عدم حماية سجلات الحسابات المالية الخاصة بي بالشكل الكافي في حال قيامي بالتسوق عبر الانترنت.				
18.	It is not safe to give my credit card number when I order online.	ليس من المأمون تقديم رقم بطاقتي الائتمانية عندما أقوم بطلب منتج عبر الانترنت.				

شكراً لمشاركتهك Thanks for your participation

## Appendix 2: Multifactor Leadership Questionnaires License

For use by: Nadia Al Jabri only. Received from Mind Garden, Inc. on March 9, 2017

**Permission for Nadia Al Jabri to reproduce 350 copies  
within one year of March 9, 2017**

**Multifactor Leadership Questionnaire**  
**Instrument (Leader and Rater Form)**  
**and Scoring Guide**

*English and Arabic versions*

**by Bruce Avolio and Bernard Bass**

Published by Mind Garden, Inc.

info@mindgarden.com  
www.mindgarden.com

### IMPORTANT NOTE TO LICENSEE

If you have purchased a license to reproduce or administer a fixed number of copies of an existing Mind Garden instrument, manual, or workbook, you agree that it is your legal responsibility to compensate the copyright holder of this work – via payment to Mind Garden – for reproduction or administration in any medium. **Reproduction includes all forms of physical or electronic administration including online survey, handheld survey devices, etc.**

The copyright holder has agreed to grant a license to reproduce the specified number of copies of this document or instrument **within one year from the date of purchase.**

**You agree that you or a person in your organization will be assigned to track the number of reproductions or administrations and will be responsible for compensating Mind Garden for any reproductions or administrations in excess of the number purchased.**

Copyright © 1995 Bruce Avolio and Bernard Bass. All Rights Reserved.

© 1995 Bruce Avolio and Bernard Bass. All Rights Reserved.  
Published by Mind Garden, Inc., www.mindgarden.com