



**The Effects of Transformational Leadership on Followers'
Creativity and Innovation**

A thesis submitted in fulfilment of the requirements for the degree of Doctor
of Philosophy in Management Studies

By

Saud Alarifi

Brunel Business School

Brunel University

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ABSTRACT

Today, the revolution of knowledge, innovation, and information is considered as important factors for psychological, technological, economical, and social world. Organisations are facing big challenges such as globalisation, emergence of knowledge based economies, intense competition, and rapid technological developments. The literature reveals controlling these challenges through innovative and creative abilities of organisation with the support of their leadership.

This study examines the relationship between transformational leadership and innovation at the organisational level and creativity at the individual level in Saudi Arabia. The Kingdom of Saudi Arabia is facing the problems because of being a young, wealthy and a developing country. The current state of innovation in its public sector and human resources creativity provides insights to policy makers with reference to the leadership approaches in this country. With the support of the relevant literature gap, a theoretical framework has been developed that explains how transformational leaders of the public sector organisations influence followers' creativity and organisational innovation. To investigate this relationship, the researcher adapted a survey instrument to obtain the data from Public Security organisation. A Self-administrated questionnaire was distributed to employees who were randomly selected from the organisation. After screening, final sample of 503 was selected for the study data analysis.

The results show that transformational leadership is positively and significantly correlated to the follower's creativity and organisational innovation. Furthermore, positive and significant relationships were found between follower's creativity and organisational innovation. In addition, the relationship between the transformational leadership and follower's creativity through the mediating role of employee psychological empowerment, support for innovation, workplace relationship, and employee learning were found positive and significant. However, intrinsic motivation does not significantly mediate the relationship between transformational leadership and creativity.

The findings of this research contribute to the behavioural and psychological literature in general and for transformational leadership literature in particular. They provide supportive insights into the state of transformational leadership for field experts, policy makers, and administration of the public security organisations especially from the Gulf countries.

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DECLARATION

I hereby declare that this piece of research work has not been submitted within a degree program in support of an application for another qualification or degree programme at this or any other institution. I also declare that, this work has been written by me and I am responsible for the work submitted in this thesis. During the preparation of this thesis work, some papers were prepared as listed below. The remaining parts of the thesis have not yet been published.

Conferences/Published Papers/Symposiums

- 1) Alarifi, S. And Althonayan, A. (2013) “*The Effects of Transformational Leadership on Followers’ Creativity in Public Sector*”, 2nd International Conference on Management, Behavioural Science and Economic Issues (ICMBE 2013), Dubai, UAE, (CD-Proceedings).
 - 2) Alarifi, S. And Althonayan, A. (2013) “*Investigating the Role of Transformational Leadership on Followers’ Creativity through Mediating Support for Innovation and Workplace Relationship: A Conceptual Approach*”, International Journal of Humanities and Management Science (IJHMS), 1(4), pp.2320-4036.
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 - The effects of transformational leadership on followers’ creativity and organisational innovation in public sector: Paper presented at **Doctoral Symposia, 2013**, Brunel University, UK.

Signature: -----

Date: -----

DEDICATION

I would like to dedicate this thesis to my family for their continual love and support, which helped me to achieve my vision.

ABBREVIATIONS

- BTS** =Bartlett's test of Sphericity
CFA = Confirmatory factor analysis
COMP = Competition
CRTY = Creativity
EFA = Exploratory factor analysis
EMLE = Employee Learning
IDAT= Idealised Attribute
IMPT = Impact
INBE = Idealised Behaviour
INCO = Individual Consideration
INMO = Inspirational Motivation
INST = Intellectual Stimulation
INTM = Intrinsic Motivation
KMO = Kaiser-Meyer-Olkin
KSA = Kingdom of Saudi Arabia
MENG = Meaning
MLQ = Multifactor Leadership Questionnaire
ORIN = Organisational Innovation.
PESI = Perception of Support for Innovation
SEDE = Self-determination
SEM = Structural equation modelling.
SPSS= Statistical package for social sciences
UK= United Kingdome
USA =United States of America
WOSR = Workplace Social Relationships
 α = Cronbach's coefficient alpha

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CHAPTER ONE

INTRODUCTION

1.1 Research Background

Today, globalisation, competition, rapid communication and technological developments are big challenges for organisations. These challenges have put substantial pressure on organisations to enhance their effectiveness and efficiency. One of the vital factors that will help organisations bearing these pressures is having innovative abilities (Andriopoulos & Lowe, 2000). More specifically, organisational innovation that provides new products/services or makes improvements to existing products/services by creativity will add weight to an organisation capability (Cummings & Oldham, 1997; Tierney, Farmer & Graen, 1999). In other words, in order to last longer than others, organisations must be more ingenious and inventive to be able to measure up, develop, and be a front-runner (Tierney et al., 1999; Jung et al., 2003). According to Woodman et al. (1993), innovation in the course of creativity plays a significant role in achieving success and creating competitive advantage at an industry level. Furthermore, innovation can have a positive impact not only at the industry level but also at the country level. Drucker (1985) states that organisations having innovative abilities will make the economy they are part of it stronger.

Creativity and innovation are crucial organisational outcomes that stem not only from overall firm strategy and access to resources but, more fundamentally, from the minds of the individual employees who, alone or with others, carry out the work of the organisation every day (Amabile et al., 2004). Moreover, the extent to which they will produce creative novel and useful ideas during their everyday work depends not only on their individual characteristics, but also on the work environment that they perceive around them (Amabile et al., 2004).

There is consent in the literature on the definition of creativity and innovation. Amabile et al. (1996; p.1155) defines creativity as “*the production of novel and useful ideas in any domain*”, and innovation as “*the successful implementation of creative ideas within an organisation.*” Based on those definitions and according to Oldham & Cummings (1996), innovation is at an organisational level whereas creativity is at the individual level. Amabile et al. (1996) state that the starting point for innovation is the creativity of organisations’ teams and individuals.

One of the vital forces highlighted in the literature in affecting creativity of employees is leadership (Amabile, 1998; Jung, 2001; Mumford & Gustafson, 1988; Scott & Bruce, 1994; Tierney, Farmer & Graen, 1999). Reviewing the literature on leadership and innovation reveals that the most significant style of leadership influencing creativity is transformational leadership (Sosik, Kahai & Avolio, 1998, 1999). According to Bass (1995), transformational leadership can increase expectations about the followers' performance. Furthermore, it aims to transform the personal values and self-concepts of followers and shift them to a new level of needs and aspirations (Jung, 2001).

The behaviour of transformational leaders is consistent with the elements of innovation and originality at the place of work (Elkins & Keller 2003). In this specific style of leadership, the behaviour of leaders is usually described as a driving force for creativity and that is because individualised consideration will act as a reward for followers through recognising and motivating them. Intellectual stimulation will improve followers' exploratory thinking through supporting origination, sovereignty and challenge and motivating incentive will stimulate the followers' process of idea creation through encouraging supporters to work consistently with the goal of the organisation (Bass & Avolio, 1995; Sosik et al., 1998).

There are limited studies tested the impact of transformational leadership on creativity and innovation (Jung, Chow, & Wu, 2003; Jung, 2001; Sosik, Kahai, & Avolio, 1998; Shin & Zhou, 2003; Mumford, Scott, Gaddis, & Strange, 2002) Furthermore, the findings of those studies are different and that calls for more empirical studies to examine this relation. Based on this gap, this study investigates the effects of transformational leadership on followers' creativity and organisational innovation. The next section is concerned with research aim and objectives, significance of the research, and research questions. This is followed by research methodology, context, and contribution and finally, research limitations and thesis structure is presented.

1.2 Research Aim and Objectives

Given the importance of transformational leadership on followers' creativity and organisational innovation, it is important to investigate the relationships between transformational leadership and follower's creativity and organisational innovation (Avolio & Bass, 2002; Amabile et al., 2004). The main objective of this research is to advance a theoretical framework that describes how transformational leaders of the public security sector organisations in Saudi Arabia influence followers' creativity and organisational

innovation. In other words, the objective of this research is to examine the link between transformational leadership and innovation at the organisational platform and creativity at the individual level.

Leadership is an important factor that influences followers' attitudes and behaviours towards the organisational goals. It always articulates future visions, supports to build up one to one relationship and elevate the interest of followers. However, transformational leadership is concerned with the creative and innovative aspects of employees and organisation. Employees' creativity is to be known as an important factor for the organisational goals. It supports individual to existing and foresee problems with the remedies through leadership creative ideas, thinking and experience. On the contrary, transformational leadership creates self-confidence, intrinsic motivation, inspirations, creative endeavours, and support for innovation, personal development and social relationships among the employees. Possessing these factors among employees having more likely to be flexible and persevering. These factors support to employees' creativity that is being attracted to and interested in a task for new and better ways of doing things. To this extent, employee's empowerment, intrinsic motivation, organisational learning, support for innovation and social relationships plays an important role for transformational leadership and creativity. However, empirical evidences have been found with the direct relationships of these factors with employees' creativity and less empirical research work found the mediatory role of these factors among transformational leadership and employees' creativity in general and particularly for Gulf countries (Gumusluoglu and Ilsev, 2009). Based on the research gap and aim, the following objectives were proposed:

- To examine the relationship between transformational leadership and followers' creativity.
- To examine the mediatory role of employee support for innovation between transformational leadership and followers' creativity.
- To examine the mediatory role of employee intrinsic motivation between transformational leadership and followers' creativity.
- To examine the mediatory role of employee empowerment between transformational leadership and followers' creativity.
- To examine the mediatory role of organisational learning between transformational leadership and followers' creativity.
- To examine the mediatory role of employee workplace relationship between transformational leadership and followers' creativity.

Organisational innovation is treated as supportive and successful ideas to achieve the organisational goals. In the organisation, innovation is applied as the effective application of ingenious initiatives that is valuable and useful for new products/services. To this extent, transformational leadership plays an important role because of increasing the new vision and ideas. Through the transformational leadership, employees can be motivated through his or her intellectual stimulation abilities to think freely and adopt exploratory and generative thinking approaches. Through the innovative ideas, leadership can reflect the behavioural aspect of followers and motivate them for organisational innovation. Thus, organisation innovation is a vision-based motivational process behind transformational leadership. Based on this approach, the researcher proposed another object of this study as followed:

- To examine the relationship between transformational leadership and organisational innovation.

As discussed above, followers' creativity is concerned with the creation of new and innovative ideas which enhance the employees' capabilities for chasing organisational goals. In the organisation, creative work approach is supported by employees' willingness to produce more products and serve common people. Thus, creativity is to be revealed to equip the employees for setting goals and solutions of organisational problems. In this regard, organisational innovation plays a vital role for successful implementation of creative ideas. The starting point for innovation is the individual creativity. This study focuses on the notion that creativity positively influences on organisational innovation and the researcher has developed following objective.

- To examine the relationship between followers' creativity and organisational innovation.

1.3 Significance of the Study

The main objective of this study is to examine the effect of transformational leadership on followers' inventiveness and organisational innovation. Literature reveals that the innovation is a very important element for any country for its development and wealth (Drucker, 1985). In addition, transformational leadership is an effective approach to motivating followers beyond expectations and set free the creativity inside them (Gong et al., 2009).

Based on that, this study is one of the first studies that apply such research in Saudi Arabia in general and the public sector in particular. This study also highlights the current state of

innovation in Saudi Arabia and its public sector, which provides insights to policy makers on how they should enhance the innovation in this particular country. Moreover, this study highlights the leadership approaches adopted in the public sector in this country, which helps identifying possible solutions for improving and developing human resources' performance and formation in Saudi Arabia.

There is no doubt that the continued development facing organisations in the Kingdom of Saudi Arabia, particularly the public sector, is faster than their ability to cope with the circumstances surrounding them (Radadi, 2001). The world revolutions of knowledge and information have resulted in several problems including psychological, technological, economic, and social. That requires dealing with those problems urgently and with a high degree of flexibility in order to find solutions. If development in various aspects (administrative, economic, social and political) is a priority that all countries seek to achieve, the field of management development is a top priority. That is because management development is a tool by which countries achieve the required administrative, economic, social, and political developments. Management development is an essential foundation that should underlie the development plans in general and management in particular, and that promote in turn, the success of development efforts in various other areas, whether it is economic, social or other areas that need to be managed efficiently and effectively. Saudi Arabia has been aware of the importance of management development (Platteau, 2008). Thus, Saudi Arabia has been very keen to develop the administrative skills and increase the effectiveness and efficiency of its public sector's institutions (Al-Gahtani et al., 2007). As a first step, the Council of Ministers issued Resolution No. 520 to establish a higher committee for administrative reform in the public sector's institution. That was followed by the establishment of the Central Department for Organisation and Management under the Royal Decree No. 19. That was followed by the establishment of units for management and administration of various government agencies. Then came the decision of the Higher Committee for Administrative Reform No. 192 dated 22-06-1989 to establish an administrative unit in every government agency under the name of the Administrative Development Unit. The role of those Administrative Development Units in public sector's institutions is to improve work efficiency through the identification of the objectives of the administrative body and study how to raise productivity and satisfaction of their staff. The success of those units to achieve the appropriate development is dependent on the innovative capabilities and creativity of staff operating them in developing effective plans for organisational development and finding the appropriate solutions to the problems they may face.

1.4 Research Questions

Leadership is one of the most crucial and dominant factors in human resources management because of dynamic environment issues including the pace of competition, new management trends and shortening product life cycle. Thus, employees and organisations want to be more creative and innovative. To this extent literature witnessed that leadership can influence on employee and organisation through future visions, remedies for solution, creative and thinking ideas and experiences. From the literature, transformational leadership witnessed to create motivation, self-confidence and personal development (Tierney et al., 1999; Jung et al., 2003; Gumusluoglu and Ilsev, 2009; Noruzy et al., 2013). However, transformational leadership performs to empowers and organisational innovation. In this regard practical studies support like Jung et al. (2003) examined the role of transformational leadership in enhancing organisational innovation and confirmed positive relations. Gong et al., (2009) found a positive relationship between employee learning orientation, transformational leadership, and employee creativity through mediating role of employee creative self-efficacy. In the literature few studies like Jung et al. (2003); Schriesheim et al. (2006); Garcia-Morales et al. (2008); Si and Wei (2012); Noruzy et al. (2013) investigated direct relationship of transformational leadership and organisational innovation and followers' creativity. Breevaart, Bakker, Hetland, Demerouti, Olsen, and Espevik (2014) predicted that the contingent reward and transformational leadership contributed to a more autonomy and support for followers' daily work engagements.

However, few studies have revealed this relationship through the mediation of employee awareness of support for innovation, authorisation, positive and negative affectivity, essential incentive, and organisational learning (Garcia-Morales et al., 2008; 2012; Gong et al., 2009; Si and Wei, 2012). Literature also witnessed that all these research studies have been conducted in developed culture, but no such study have been found in Gulf countries. Also pointed out by Gumusluoglu and Ilsev, (2009, p-462) that "*there is a research gap in examination of mediating roles of empowerment and innovative climate in the relationship between transformational leadership and followers' creativity*". Following the literature, this study proposed to conduct in its fieldwork in the Kingdom of Saudi Arabia to give the answers of the following questions.

1. What is the role of employees' perception of support for innovation, empowerment, intrinsic motivation, organisational learning, and workplace relationship on the relationship between the transformational leadership and followers' creativity?
2. What is the relationship between transformational leadership and organisational innovation?
3. What is the relationship between followers' creativity and organisational innovation?

1.5 Research Methodology

This study proposes to examine the impact of transformational leadership on followers' creativity directly and through the mediation of employees' perception of support for innovation, empowerment, intrinsic motivation, organisational learning, and workplace relationship. Furthermore, this study investigates the impact of transformational leadership on organisational innovation. This research is based on an extensive review of the literature, and that supported developing a theoretical framework. Following the theoretical framework developed for this study, a quantitative method was adopted to collect and analyse data. In this study, a survey questionnaire was used for data collection. There is support from the literature regarding the use of survey questionnaires. They highlight the features of individual perception and viewpoints as well as organisational strategies and traditions (Baruch & Holtom, 2008). Chen (2005), argues that the dimension of attitudes regularly consist of not only questioning the respondents on their feeling concerning a specific object but if they do have confidence in that object. In addition, interviews involve asking people about themselves represent the only viable mean of finding out about them within a qualitative research strategy (Bryman and Bell, 2007).

The essence of this study is to examine and analyse the influence of transformational leadership on followers' creativity and organisational innovation by using a survey questionnaire for data collection. The context of this study is the public security of Kingdom of Saudi Arabia. Based on the research methods and measurements of innovation, creativity, and transformational leadership used in previous studies, the most appropriate way to collect the data was a survey questionnaire. Moreover, the questionnaire is an efficient instrument for collecting data, specifically, when the researcher knows for sure what is required and how to measure the variables of interest (Sekaran, 2003).

The questionnaire was used with the aim of addressing the research questions and confirming or rejecting hypotheses of this study. The target population of the research is organisations of the public sector in Saudi Arabia, specifically, their employees, leaders, and managers. More details about research method are discussed later in the research methodology chapter.

1.5.1 Rationale of the Study

Today leadership is emerging as a new field in the history of organisational behaviour. It is considered as the act of influencing and behavioural activities to induce followers to behave in a desired manner towards the attainment of specified goals. Burns (1978) argues that leadership is one of the most examined phenomena but the least understood phenomenon. He describes leadership as a flow of developing interrelationships in which leaders are constantly extracting inspirational opinions from followers and adapting their conducts as they meet receptiveness or opposition, in a constant course of “*flow and counter flow*”. Based on the leadership literature, transformational leadership has been given an important conceptualisation as a process that through it “*leaders and followers raise one another to higher levels of morality and motivation.*” Bass and Riggio (2006, p.3), argued that transformational leaders are individuals that “*stimulate and inspire followers to both achieve extraordinary outcomes and, in the process, develop their leadership capacity.*”

Transformational leadership reflects a kind of leadership in which leaders move their followers beyond immediate self-interests through idealised influence (charisma), inspiration, intellectual stimulation, or individualised consideration. Bass (1985) and Bass and Avolio (1994, 1995) state that there are four behavioural dimensions of transformational leadership: charismatic role modelling or idealised influence, inspirational motivation, individualised consideration, and intellectual stimulation. Based on transformational leadership literature these four behavioural dimensions are more capable of reforming the beliefs and customs of followers, encourage the variations of individuals and organisational, and support their followers to achieve beyond performance expectations (Jung & Avolio, 2000).

In the leadership domain, creativity and innovation have important value to understand the follower’s motivation and organisational innovation. According to Amabile et al. (1996, p.1155), “all innovation begins with creative ideas.” Successful implementation of new programs, new product introductions, or new services depends on a person or a team having a good idea and developing that idea beyond its initial state. Reviewing the

literature on transformational leadership, follower's creativity, and innovation, different factors have been found to be positive and significant. Sosik et al., (1998) researched the outcomes of high-level and subtle stages of transformational leadership (four factors i.e. fluency, flexibility, originality and elaboration) on a group's creativity under unidentified and recognised automated brainstorming environments. Results from one hundred and fifty-nine undergraduate students at a public university in the Northeast show that groups functioning below advanced stages of transformational leadership produced additional idea explanations and novel results than those operating in lesser levels of transformational leadership. Likewise, unidentified groups were further malleable in creating viewpoints than recognized groups. Lee et al. (2011) conducted an empirical study of transformational leadership, team performance, and service quality in retail banking. Using data collected from 192 employees of retail banks in Macau, China, researchers investigated five dimensions of transformational leadership i.e. idealised influence (attributed), idealised influence (behaviour), intellectual stimulation, inspirational motivation and individualised consideration on team performance with respect to team cohesion, team leader, job satisfaction and team competence. Result implies that leadership and service quality were not directly associated but mediated by team performance.

By applying a survey questionnaire Jung et al., (2003) collected data from 32 Taiwanese companies in the electronic/telecommunications industry. Study results confirmed an unswerving and progressive association between transformational leadership and innovation. Results reveal noteworthy and encouraging relations with empowerment and innovation-supporting organisational climate. However, organisational innovation has a substantial nevertheless undesirable association with empowerment and also has a significant and positive relation with innovation-support organisational climate. Schriesheim et al. (2006) tested the path-goal and transformational leadership theory predictions at the individual level of analysis. By applying confirmatory factor analysis, hierarchical linear multiple regression and within and between entity analysis on a sample of 169 social services workers in 40 groups in New York, results confirmed no evidence supporting either the path-goal or additive augmentation hypotheses. However, a positive moderator effect was found for some transformational leader behaviours and the leader contingent reward behaviour variable, supporting a form of augmentation effect that is not incongruent with Bass's approach to transformational leadership. Garcia-Morales et al. (2008) investigated the impacts of transformational leadership on organisational accomplishment through knowledge and innovation. Researchers seek to fill the gap by analysing theoretically and empirically leaders' opinions of diverse variables that are in-

between knowledge and innovation. They also examined the connection between transformational leadership and organisational performance. Based on the data from 408 Spanish organisations, results confirmed that transformational leadership supports the development of the foundation of organisational knowledge in the organisation. Results also confirmed that inefficient knowledge encourages absorptive capacity and transformational leadership helps to improve absorptive capacity. Furthermore, results proved that the absorptive capacity also facilitates the acquisition, transfer, and use of tacit knowledge. Finally, transformational leadership affects slack knowledge, absorptive capacity, tacit knowledge, organisational learning, and innovation that allow the creation of positive synergies that improve organisational performance. In a recent study, Gong et al. (2009) focused on the link between the positioning of employee learning, transformational leadership, and employee creativeness through reconciling the effectiveness of employee creativity. Main study data were collected from 277 insurance agents in Taiwan. By applying Hierarchical Linear Modelling to test hypotheses, researchers found that employee creativity was linked to worker's sales as well as their achievements as rated by their supervisors. On the other hand, through the mediation of employee creative self-efficacy, the orientation of employee learning and transformational leadership were interrelated to employee creativity. Gumusluoglu and Ilsev (2009) investigated the impact of transformational leadership on organisational innovation to determine whether internal and external support for innovation as contextual conditions influence this effect. The outcome upheld the positive impact of transformational leadership on organisational innovation. Results proved that the peripheral cooperation for innovation was found to considerably moderate this result. Precisely, the connection between transformational leadership and organisational innovation was greater with an enormous support from peripheral factors than when there was no external support. Furthermore, their study showed that transformational leadership is an essential factor of organisational innovation and urges leaders to absorb transformational leadership behaviours to encourage organisational innovation.

Literature has proved that the creativity of followers and organisational innovation can be unequivocally influenced by leaders. Many empirical studies also revealed that perception of support for innovation and psychological empowerment is the main source of employee creativity (Tierney et al., 1999; Gumusluoglu & Ilsev, 2009). A transformational leader authorizes his supporters, increases organisational achievement and cultivates an "*innovative climate*". Gumusluoglu and Ilsev, (2009, p-462) highlights the research dearth in investigating the reconciling roles of "*empowerment and innovative climate in the*

relationship between transformational leadership and followers' creativity". To fill this gap, this study proposes that an employee perception of support for innovation, empowerment, and intrinsic motivation is a way of underlying the consequences of transformational leadership on follower's creativity in public sector organisations. Based on the literature review, this research may be the first study in the context of public sector organisations.

1.6 Research Context

The Al Saud family rules the Kingdom of Saudi Arabia (KSA) with monarchy system. The total population is approximately 29 million including 5.8 million outsiders. The country is ruled by King Abdullah bin Abdulaziz Al Saud since 2005 under the title Custodian of the Two Holy Mosques. The government is run by Sharia (Islamic law) and the 1992 Basic Law. According to the Basic Law, system of governance, rights of citizens, and powers and duties of the government was sets out.

In Kingdom of Saudi Arabia, public security organisation has an important role for public services. This organisation was established in the year of 1926 and is considered the beginning of the establishment of the Public Security sector, which was first called the General Police Directorate and based in Mecca. The new system was introduced in 1950 under the name of the System of the Public Security Directorate in Kingdom. In this system public security was defined as "the armed forces responsible for the maintenance of order and the maintenance of public security and to provide reasons for public convenience, to prevent crimes before they happen and act after the commission of crimes, and the implementation of all that is asked of them implemented of regulations and instructions, and orders".

According to Harith (1990), this system was divided into two sections such that first section includes the military armed forces responsible for maintaining order and the maintenance of public security, and the provision of public amenities to prevent crimes before they occur and act after they were committed. The second section consists of non-armed civil servants, which include secretaries, accountants, and registrars according to their positions and levels that belong to the Public Security Directorate. In the Kingdom of Saudi Arabia, Public Security sector is working under the Ministry of Interior.

In the year 1960, major considerations were made in the history of Public Security Sector. In this major shift, many changes were launched including the principle of specialty, administrative organisation, the creation of new departments, expansion of the existing profiles, and more organised criminal proceedings. However, in 1964, a royal decree was issued approving the fifth law regulating the security services since the entry of King Abdulaziz to Hijaz (Radadi, 2001). According to Radadi (2001; p.221-223), the first Article of this law stated the name of this law to be “the System of Internal Security.” The first Article of this law also stated that “the armed forces responsible for maintaining the discipline and maintenance of internal security on land, sea, and in particular to prevent crimes before they occur, seizure and investigation after the commission, and the protection of life and money as imposed by regulations, royal orders, decisions of the Council of Ministers, orders of the High Commissioner, and the decisions and orders issued by the Ministry of the Interior.”

For running the organisation a set of foundations, principles of organising the work and rules in the Directorate were adopted in 1975. According to administrative titles in the Kingdom, directorates and departments associated with them based on the theories, principles of organisation, administration, and the recommendations of the Second Conference of Security Leaders and Police in the Arab countries. According to Radadi (2001; p-246-248) the job in the public security system was divided according to its nature and purpose and uniformity into three sections:

1. The basic duties and tasks: they include crime prevention in its location, seizure and investigation after they have occurred, and the arrest of the perpetrators and collecting evidence prosecutors to provide them when presenting them to the judiciary, and doing the duties is liable to the “Operations Affairs and its Subsidiaries”.
2. The special tasks and duties: they include regulating traffic, control irregularities, and car accidents investigation, and doing these duties is liable for the “General Directorate of Traffic and its subsidiaries.” Duties include the implementation of sanctions and criminal provisions against guilty civilians, taking care and rehabilitation of guilty people to return to the community good citizens, and doing these duties is liable to the “General Administration of Prisons and its subsidiaries.” Duties include considering claims and civil disputes, investigating and referring them to justice, and legitimate implementation of what comes out of the provisions of the judicial or administrative jurisdiction, doing these duties is liable for the “Civil Rights’ sections of the Police

Department.” Duties include maintaining security in the pilgrimage seasons and occasions, is liable for the “Pilgrimage Force and Seasons.”

3. Supporting duties and tasks: they include supervision, administration, the preparation of training plans, scholarship, and visits to prepare officers, personnel and staff practically, technically, and culturally; providing the needs of the Public Security sector and its subsidiaries of equipment, vehicles, publications, and weapons; monitoring and implementing regulations, financial instructions regarding the Public Security Directorate’s accounts; giving staff their allowances; the implementation of contracts and financial commitments; and monitoring of financial departments in the branches of the Public Security Directorate.

From 1976 to 1993, the process of modernisation and reorganisation of configurations for most branches continued. It resulted in the re-formation of the Public Security sector where many departments were merged with similar operations, appointing Vice and five assistants to the Public Security Manager, and began to apply the idea of fieldwork in one type of patrols that combines traffic and police patrols known as the “Security Patrols”. From this process, it is clear that they include two types of departments and units, which are as the following (Marghalani 1999, p.29):

1. Departments concerned with planning, training, preparation, and providing telecommunications and everything related to technical, administrative, and financial support to various security branches, which is supervised by the Assistant Director of Public Security for administrative, technical, operations, and logistics affairs, and departments of follow-up, budget, finance, and public affairs and legal affairs.
2. One department performs key functions and specialisations of public security represented in regional police departments, administrative control departments, crime control departments, criminal investigation and forensic evidence, weapons and explosives, criminal studies, which associated administratively with the Assistance of the Director of Public Security for Criminal Affairs, department of pilgrimage affairs, public departments of drugs, prisons, traffic, emergency forces, and security of roads and facilities.

Some functions of the Directorate of Public Security include the following:

- Arrest and extradite criminals to justice, including drug offenders
- Cooperate with international bodies to monitor the movements of criminals

- Protect the Two Holy Mosques attendees and facilitate the movement of traffic in the holy sites
- Regulate and control traffic around the Kingdom and penalise violators of traffic regulations.
- Issue all types of traffic permits
- Prepare and implement security and traffic plans related to public security tasks
- Guard industrial petroleum facilities
- Maintain order and security in general

Finally, new administrative reforms were launched in 2007 in which a new and separate General Directorate of Prisons, the General Directorate of Narcotics Control, and the Premises Security Forces command of the public security sector. These are directly linked to the Ministry of Interior, as evidenced in the Administrative structure of the Ministry of the Interior (see Appendix6). It also amended the names of some of the public security departments to cope with the requirements of the time as evidenced in the administrative structure of public security sector (see Appendix7).

Today, public security organisation plays an important role in Middle East. However, the Kingdom of Saudi is one of the fastest growing markets for safety and security solutions, equipment and systems. To this extent, the Government of the Kingdom is utilising billions of dollars to maintain and update security measures in cities, institutions, transportation infrastructure and utility plans.

1.7 Thesis Structure

The study is divided into seven main chapters:

Chapter One introduces the background of the research, its aims and objectives, the significance of the study, research questions, model, methodology, and research context. Furthermore, this chapter highlights the respondents, contribution, and limitation of the study.

Chapter Two is a thorough analysis and critique of the literature on transformational leadership, organisational innovation, creativity, and factors affecting them. Through this analysis, previous empirical studies have also been reviewed. In the end, the theoretical framework of this study is presented.

Chapter Three gives an introduction, and theoretical framework based on the literature gap. This chapter describes the hypotheses applied in the study.

Chapter Four gives the background on the methodology. It describes in detail the type of research method adopted for the study. It also presents the measurement scale for this study's questionnaire. Furthermore, it outlines the research design, data collection, and data analysis process.

Chapter Five presents the pilot study and main study data analysis. This chapter describes the data collection process and data recording, screening prior to analysis including treatment of missing data, outliers, data normality, data linearity, and homogeneity. This chapter also shows the sample characteristics of the respondents and then the reliability and validity of the instrument. After that exploratory factor analysis was conducted. It presents the research hypotheses testing results.

Chapter Six discusses the issue of population and sample used for this study. This chapter also explains the measurement scale purification and then discussed the final results.

Chapter Seven presents the conclusion and implication of the study. It summarises the outcomes of the study, provides some recommendations for policy makers and presents research limitations and suggestions for further research.

CHAPTER TWO

LITERATURE REVIEW

2.1.1. Introduction

The researcher will address and broaden the discussion about the leadership and its new approaches in this chapter. This chapter also discusses transformational and transactional leadership. The present discussion will culminate with an account of how four dimensions are interacting with the transformational leadership. The two primary outputs such as creativity and innovation of transformational leadership have been discussed in this chapter. In this context, transformational leadership has been discussed with the followers' creativity, organisational innovation, empowerment, support for innovation, organisational learning and workplace relationship. After than the literature review with related to transformational leadership has been given to find the research gap. Finally, this chapter was concluded with the research purposes through the research gap.

The study of leadership has an important position in the history of organisational behaviours because ability to inspire, lead, and motivate employee is a crucial issue in any organisation. Today's organisations are facing a dynamic environment characterised by increasing globalisation, rapid technological change, pace of competition, new management trends and shortening product life cycle. In this situation, an organisation needs to be more innovative and creative than before to lead, inspire, survive, grow and compete the technological driven one especially. Thus, leadership has been one of the most crucial and dominant factors in the domain of management and organisational psychology. Frequently many scholars developed various theories, models, and methods for effective and efficient leadership style. It is not surprising that leadership is claimed to be one of the most dominant research area where a number of different approaches such as behavioural, contingency, relational, trait, skeptic, and information processing have been launched. Indeed, it has been one of the most researched topics in management, psychology, sociology, political science, as well as public and educational administration. However, literature reviews covers sufficient ground to show the current state of the research topic that support to develop a theoretical framework. A review of the literature on leadership, transformational leadership and its dimensions is the focus of this chapter.

2.1.2. Leadership

Leadership is considered as the act of influencing and behavioural activities of an organised group to induce followers to behave in a desired manner and influence through the communication process towards the attainment of specified goals. It is very difficult to define the concept of leadership because the term is taken from everyday vocabulary conveying extraneous connotations that create ambiguity of meaning. In the organisation domain, it has been defined with different dimensions which confirmed by Stodgill (1974, p.259) *that there are almost as many different definitions of leadership as there are people who have attempted to define the concept*. Since the last five decades, researchers and scientists define the term leadership with different classification according to their individual perspectives and their research interests. Reviewing the literature on the definition of leadership, find that there are different definitions. Burns (1978) argues that leadership is considered one of the most examined phenomena but the least understood phenomenon. Burns (1978) views leadership as a process rather than a set of discrete acts. However, following few important definitions of leadership has been given by scholars who investigated this phenomenon over a long period.

- Stodgill (1950, p-3) considers leadership as “the process (act) of influencing the activities of an organised group in its efforts toward goal setting and goal achievement.”
- Hemphill and Coons (1957, p-7) define it as “the behaviour of an individual when he/she is directing the activities of a group toward a shared goal.”
- Bennis (1959, p-295) defines it as “the process by which an agent induces a follower to behave in a desired manner.”
- Tannenbaum, Weschler and Massarik (1961, p-24) define it as the "interpersonal influence, exercised in a situation, and directed, through the communication process, toward the attainment of a specified goal or goals."
- Katz and Kahn (1978, p-528) define it as “the influential increment over and above mechanical compliance with the routine directives of the organisation.”
- Yukl (1989, p-253) defines leadership as it “involves influencing task objectives and strategies, influencing commitment and compliance in task behaviour to achieve these objectives, influencing group maintenance and identification, and influencing the culture of an organisation.”
- Jacobs and Jaques (1990, p-281) define it as “*a process of giving purpose (meaningful direction) to the collective effort, and causing willing effort to be expended to achieve the purpose.*”

- Clark and Clark (1996, p-25) define it as “*an activity or set of activities, observable to others, which occurs in a group, organisation, or institution and which involves a leader and followers who willingly subscribe to common purposes and work together to achieve them.*”
- Northouse (1998, p-3) defines it as “*a process whereby an individual influences a group of individuals to achieve a common goal.*”
- Bush and Glover (2003, p-8) define it as “*a process of influence leading to the achievement of desired purposes.*”

Reviewing the above definitions of leadership find that each group of scholars have highlighted various aspects of leadership and provided different descriptions of leaders, followers, and situations. However, leadership has been conceived in terms of traits, leader behaviours, interaction patterns, role relationships, followers’ perceptions, exercise of influence, inducing compliance, a form of persuasion, a power relation, and many other combinations (Brass, 1990, Yukl, 1989). In the above definitions, all of the researchers have something in common which is the emphasis on guiding a group of people to achieve a particular goal. Consequently, the key point here is that examining leadership by many scholars has the same purpose which is discovering what is the most effective and efficient way of leading followers to achieve a goal or a set of goals. Here comes the importance of transformational leadership as based on the literature - the most effective and efficient way to boost followers’ performance and creativity in order to accomplish a particular task (Li and Hung; 2009; Wang et al., 2010; Lee, 2011; Wang et al., 2011; Walumba and Hartnell, 2011; Gracia-Morales et al., 2012; Noruzy et al., 2013).

2.1.3. Leadership: A New Approach

Today’s leadership is emerging as a new field in the history of organisational behaviour. In the literature, leader acts as boundary role to influence the activities of an organised group towards achieving an organisational goal (Stodgill,1950; Tannenbaum et al., 1961; Dent, 2012; Arnold et al., 2013). Thus leadership is considered as a one of the most examined but the least understood phenomenon which is related to a stream of evolving interrelationships in which they are continuously evoking motivational responses from followers and modifying their behaviours as they meet responsiveness or resistance, in a ceaseless process of flow and counter flow (Burns, 1978). Given that, leaders often have a major degree of control over different prospects of followers’ tasks. They can influence followers’ behaviour in a way that induces them to participate in achieving organisational goals (Fleishman, 1973). Accordingly, leadership has been identified as an important factor to influence employees’ creative behaviour and performance (Mumford and Gustafson,

1988; Jung, 2001; Li and Hung; 2009; Wang et al., 2010; Walumba and Hartnell, 2011; Gracia-Morales et al., 2012).

Thus, this domain has been recognised for further research to know the different variables with different correlations, environment, and culture. In the literature, leadership has been found the most effective and efficient way to boost followers' performance and creativity in order to accomplish a certain task (Li and Hung; 2009; Lee, 2011; Wang et al., 2011; Gracia-Morales et al., 2012; Noruzy et al., 2013). According to researchers such as Katz and Kahn (1978), and Howell and Avolio (1993), leadership positions act as boundary roles in organisations. Therefore, they are required to influence followers' behaviour in a way that soothes the progress of the achievement of organisational goals (Fleishman, 1973). Given that, leaders often have a major degree of control over various aspects of followers' tasks, therefore, over their outcomes. There are different mechanisms in which leaders can influence followers' behaviours and attitudes such as goal definition, role modelling, resource allocation, emphasis on organisational norms and values, and through influencing their perceptions towards work environment (Bass, 1981; Bass, 1985). Amabile et al. (1996) argue that leaders, who are closer to the daily work of their followers, can influence them in a direct way with different ways.

Leadership Styles

In the work environment, leadership styles align with organisational objectives, needs, goals, and culture. In the postmodern leadership literature, there has been an increase in the types of leadership styles. For example, gender leadership, race leadership, charismatic leadership, moral leadership, social justice leadership, and spiritual leadership. However, in the global categories of leadership, four styles existed, for example, authoritarian, participative, transactional and transformational leadership. However, all style of leadership possessed advantages and disadvantages into existing work environment according to the goals and culture of an organisation. To this context, organisations depend upon the needs and necessary tasks for offering leadership styles within the organization. The authoritarian leadership enjoys with coercive tactics to apply rules. They are applying Machiavellian approach to manipulating people and decision making. In this style, control is crucial for management strategy. However, authoritarian leadership emphasis on workplace objectivity that tends to solve peoples' problems without any race and gender.

The second style is participative in nature often called the democratic leadership style. It strives to move away from the authoritarian leadership to the human side. This style is

more human relations and organisational productivity because it is linked with open inquiry and social and informal structures system. In the organisation, employers, managers, or leaders should behave workers with honesty, dignity and change to a more collegial team concept. Social system in the organisation is imperative factor in motivating employees for achieving organisational goals and in this system participative leadership plays an important role. The decision making in the organisation centred on people need rather than stress is primary role of participative leadership. This leadership style is often called democratic leadership in which they value the input of peers and team members where decisions are made by participative leaders. It always supports employees morale because of their contributions to the decision-making process. However, this style faces challenges when organisation requires making decision in a short period.

The third style is global leadership which is transactional leadership and associated with organisational expectations and goals to perform and provide rewards or punishment based on people doing the work. In this style managers or leaders and team members set predetermined organisational goals together for doing work together. This style of leadership is suitable where the bureaucratic side conflicts with the professional one. To the end managers or leaders correct or train employees through the powers when he or she fails. In most organisations, this leadership reflects the reality of the workplace. Finally, transformational leadership is related with human understanding and depends on the high level of communication of management to meet organisational goals. In this style of leadership, every person is empowered to become a productive learning community and fulfil highest needs. This is discussed further in the subsequent section .

Transformational Leadership

Leadership style has been highlighted in the literature as an important strategic factor affecting innovation and creativity (Nonaka and Takeuchi, 1995; Senge et al., 1994; Hsiao and Chang, 2011; Denti, 2012; Gracia-Morales et al., 2012; Si and Wei, 2012; Noruzy et al., 2013). More specifically, transformational leadership achieved high levels of attention in the field of leadership lately (Lowe et al., 1996). That is due for being a different approach for stimulating followers comparing to other leadership styles (Gardner and Avolio, 1998; Howell and Avolio, 1993; Yammarino et al., 1993). According to Howell and Avolio (1993), Hsiao and Chang (2011), Gracia-Morales et al. (2012), Si and Wei

(2012), and Noruzy et al. (2013), transformational leadership encourages innovation and creativity and creates advantages for organisational performance. Consequently, leaders should adopt this style of leadership when they are willing to undertake self-evaluation of their way of acting (Bass, 1999). It also has a positive impact on learning, organisational innovation and performance (Argyris and Schon, 1996; Glynn, 1996; Hurley and Hult, 1998; Senge et al., 1994; Hsiao and Chang, 2011; Gracia-Morales et al., 2012; Noruzy et al., 2013).

In the literature of transformational leadership, a growing number of studies provide evidence that transformational leadership can shift followers' performance beyond expectations, and increase the satisfaction of followers and commitment of groups and organisation (Bass, 1985, 1998; Bass and Riggio, 2006). According to Bass (1999), transformational leadership reflects a kind of leadership in which leaders move their followers beyond immediate self-interests through idealised influence (charisma), inspiration, intellectual stimulation, or individualised consideration.

The Foundation of Transformational Leadership Theory

The theory of transformational leadership was introduced by Burns (1978). The aim of Burns (1978) was to find a concept to describe how leaders achieve radical change in the attitude and behaviour of their followers. This concept was mainly further developed by Bass (1981, 1985, 1988, 1990, 1997, 1998), Bass and Avolio (1993, 1995), Bass and Steidlmeier (1999), and others. Although the conceptualisation of transformational leadership that Bass (1985) developed is based on Burn's (1978) work, there are a couple of differences between the two approaches.

Burns (1978) define transformational leadership as a process that through it "*leaders and followers raise one another to higher levels of morality and motivation*". According to Bass and Riggio (2006, p.3), transformational leaders are those who "*stimulate and inspire followers to both achieve extraordinary outcomes and, in the process, develop their leadership capacity*". Thus, those leaders facilitate the growth and development of their followers into leaders (Bass and Riggio, 2006). That is done through two things, first, responding to followers' needs by empowering them, second, aligning the objectives and goals of followers, the leader, the group, and the larger organisation (Bass and Riggio, 2006). Furthermore, Burns (1978) states that transformational leadership can be performed by anyone in the organisation in any level of authority. Bass (1985) views transformational leadership in terms of the leader's impact on their followers. When followers feel trust,

admiration, loyalty, and respect towards their leader, and they are motivated to achieve beyond expectations, their leader can transform them through three things (Bass 1985).

- (1) Leaders can attract their attention towards the importance and value of task outcomes.
- (2) They can engage them to transcend their self-interest for the sake of the organisation or team.
- (3) Leaders can also support their followers achieving their higher-order needs.

Bass (1985) believes that the impact of transformational leaders is not just a result of their charisma. He views transformational leadership far more than just the impact of a leader's charisma. According to Bass (1985), "charisma is a necessary ingredient of transformational leadership, but by itself it is not sufficient to account for the transformational process".

2.1.4. Transactional and Transformational leadership

Burns (1978) differentiates between two types of leadership: transactional leadership and transformational leadership. Whereas Burns (1978) argues that the two styles represent opposite ends of the same construct, Bass (1985) argues that the two styles of leadership in fact represent different constructs. According to Bass (1999, p-11), transactional leadership refers to "the exchange relationship between leader and follower to meet their self-interests". Furthermore, transactional leadership may take the form of contingent reward in which the leader clarifies for the follower through direction or participation what the follower needs to do to be rewarded for the effort (Bass, 1999). It also may take the form of active management-by-exception, in which the leader monitors the follower's performance and takes corrective action if the follower fails to meet standards (Bass, 1999; Li and Hung 2009; Wang et al. 2010; Walumba and Hartnell 2011). Bass (1999) argues further that transactional leadership may take the form of passive leadership, in which the leader practices passive managing-by-exception by waiting for problems to arise before taking corrective action or laissez-faire and avoids taking any action. Howell and Avolio (1993) argue that the main difference between active management-by-exception and passive management-by-exception is the timing of leadership intervention. Passive leaders do not take corrective action until a problem has emerged, whereas, active leaders take a proactive approach by monitoring followers' actions, anticipating problematic issues, and taking action before a problem emerges and causes severe problems (Howell and Avolio, 1993).

In contrast, transformational leadership refers to “the leader moving the follower beyond immediate self-interests through idealized influence (charisma), inspiration, intellectual stimulation, or individualized consideration” (Bass, 1999, p-11). Furthermore, transformational leadership elevates the follower’s level of maturity and ideals as well as concerns for achievement, self-actualisation, and the well-being of others, the organisation, and society (Bass, 1999). The leaders delegate assignments as opportunities for growth (Bass, 1999). Moreover, Bass and Riggio (2006) state that transformational leaders move beyond exchange relationships and inspire individuals to perform beyond expectations. That means achieving more than what followers believed was possible (Bass 1998). Yukl (1999) adds that transformational leaders have a larger impact on their followers in motivating them using this style of leadership through transforming their attitudes, beliefs, values, and needs if compared with transactional leaders who principally depend on a strategy of getting compliance. According to Burns (1978), transformational leaders not only identify followers’ needs, but also try to upgrade them by searching for ways to satisfy their higher needs in accordance with Maslow's (1954) hierarchy. Transformational leaders take actions to motivate or modify followers’ needs, rather than discovering them by finding ways to influence their followers to rise above their own self-interests for the sake of the organisation (Bass 1985). Howell and Avolio (1993) state that transactional leadership supports their followers’ development through motivation in which they can take further responsibility.

Burns (1978) reveals that transactional leaders are motivating their followers through engaging with self-interest. Dubinsky et al. (1995) argue that transformational style of leadership is more effective than a simple reliance on constructive exchanges (i.e. transactional style), and such exchanges are considered more effective than corrective transactions of such style of leadership. Furthermore, Howell and Avolio (1993) argue that transformational leaders concentrate their attention on developing and achieving longer term goals, hence, they form an attractive overall vision and inspire followers to track goals that support such vision (Conger et al., 2001). In addition, Burns (1978) distinguishes between transactional and transformational leadership according to their impact, which is based on bureaucratic authority.

2.2. Transformational Leadership Dimensions

Growing number of studies found that transformational leadership can shift followers' performance beyond expectations, and increase the satisfaction of followers and commitment to the group and organisation (Bass and Riggio, 2006; Li and Hung 2009; Wang et al., 2010; Walumba and Hartnell, 2011). The transformational leadership notion may reflect behavioural and attribution in leaders to move their followers beyond immediate self-interest. In this connection, many researchers such as Bass (1995, 1999), Bass and Avolio (1994, 1995) state that there are four behavioural dimensions of transformational leadership: charismatic role modelling or idealised influence, inspirational motivation, individualised consideration, and intellectual stimulation.

2.2.1. Charismatic Role or Idealised Influence

Idealised influence or charisma refers to the *leader's charisma that provides vision and sense of mission, instills pride, and gains respect and trust* (Bass, 1990). The term 'idealised influence' is used by Bass (1985) to describe the charismatic quality of transformational leaders. According to Jung and Avolio (2000), idealised influence dimension refers to a charismatic ability of a leader to develop a vision and to influence followers to accept and share that vision. The idealised influence in terms of both behaviours and attributions serves as a charismatic role model for followers (Bass and Avolio, 1995). Bass (1985) defines charisma as a process in which a leader influences followers by arousing strong emotions and identification with the leader. Avolio and Bass (2002) argue that the ability of transformational leaders to appeal to personal beliefs and interests of their followers on an emotional level helps leaders influencing their followers to accept their vision. According to Bass and Avolio (1995), leaders use their idealised influence to inspire loyalty, respect, and admiration as well as stress on the significance of having a collective sense of mission. They further state that usually charismatic leaders' followers feel pride for their association with their leaders. Furthermore, Avolio (1999) argues that idealised influence is also when leaders get respect and trust of their followers from doing the right thing. According to Piccolo and Colquitt (2006), charismatic leaders are able to encourage followers to consider the moral and ethical results of their decisions. Therefore, they become the role models for their followers (Kelloway, and McKee, 2007).

2.2.2. Inspirational Motivation

Inspiration or 'inspirational motivation' is another dimension of transformational leadership. It refers to the leader's ability to communicate high expectations, use symbols to focus efforts, express important purposes in simple ways (Bass, 1990). According to

Bass and Avolio (1990), inspirational motivation can be defined as the extent to which a leader communicates an appealing vision, uses symbols to focus follower effort, and models appropriate behaviours. This dimension represents the ability of leaders to articulate a vision in a way that is appealing to their followers (Piccolo and Colquitt, 2006). Leaders use inspirational motivation to energise their followers through articulating a forceful vision (Avolio et al., 1999; Sosik et al., 1998). Moreover, Yammarino and Dubinsky (1994) argue that transformational leaders show confidence and optimism when communicating a vision and that builds enthusiasm among their followers. However, Bass and Avolio (1995) explains that through inspirational motivation, leaders articulate an appealing vision of future, direct their followers to the way of achieving the aims, and demonstrate confidence in their followers' abilities. In addition, transformational leaders are considered effective in communicating significant goals in ways that their followers can understand and relate to (Rosenbach and Taylor, 1998).

Intellectual Stimulation

The most important dimension of the transformational leadership is the intellectual stimulation, which refers to the leader's ability to promote intelligence, rationality, and careful problem solving (Bass, 1990). Bass (1985) defines intellectual stimulation as a process in which leaders increase follower awareness of problems and influence followers to view problems from a new perspective. It appears when the leader helps followers to become more innovative and creative. Transformational leaders have a propensity to challenge assumptions and approach old problems and situations in new ways and that allow stimulating their followers' efforts to be creative and innovative (Avolio and Bass, 2002). In addition, leaders using their intellectual stimulation expand and lift up their followers' interest to motivate their followers thinking of problems from different point of view (Bass, 1985).

Individualised Consideration

Individualised consideration refers to the leaders' ability to give personal attention, treat each follower individually, coach the progress of their followers, and advises those (Bass, 1990). According to Avolio and Bass (2002), transformational leaders give special attention to the growth and achievement of their followers individually. Individualised

consideration may involve providing support, encouragement, and developmental experiences to followers (Bass, 1985). He further explains that leaders engage in 'individualised consideration' when they show a developmental orientation towards their followers. Furthermore, individualised consideration appears when leaders pay attention to the developmental needs of followers, support, coach the development and delegate assignments as opportunities for growth (Bass, 1999). Through individualised consideration, leaders establish one-to-one relationships with their followers, and recognise dissimilarities in their wants, abilities, and ambitions (Bass and Avolio 1995).

Based on above, *transformational leaders must have charisma, inspiration, intellectual stimulation and individualised consideration* (Bass, 1999; Bass and Avolio, 2000). Consequently, given transformational leaders those four elements, their followers are expected to be more creative and innovative. In this regard, researchers have examined the significant of leadership and found that leaders having those four behavioural dimensions are more capable to improve employee's values and norms, encourage individual and organisational alterations, and support their employees to perform beyond performance expectations (Jung and Avolio, 2000). In the above discussion, the main focus of the leadership literature is on followers' innovation and creativity, which may encourage both employees and organisations to promote inspiration, motivation and energise for an appealing vision of future.

2.3. Creativity and Innovation

In an organisation, employees' innovation begins with creative ideas. This also leads to successful implementation of new programs, new product introductions, or new services depends on a person or a team having a good idea and developing that idea beyond its initial state (Amabile et al., 1996). Mumford et al. (2002) argue that although typically there is association between creative work and artists and scientists, creative work is not defined with respect to a particular occupation. Navigating away from the traditional psychological approach to creativity, which focuses on the characteristics of creative persons, Amabile et al. (1996) assume that the social environment can influence both the level and the frequency of creative behaviour. Creative work occurs on jobs, any job, that involves certain types of tasks (Mumford et al., 2002). Furthermore, creative work can occur when the tasks presented involve complex, ill-defined problems where performance requires the generation of novel, useful solutions (Mumford et al., 2002). Based on that, creative work can occur in advertising, engineering, finance, and management, and

involves not just idea generation but subsequent idea implementation as idea implementation may call for as much creativity as initial idea generation (Mumford et al., 2002). Creativity is defined by Amabile et al. (1996, p.1155) as “the production of novel and useful ideas in any domain”. Furthermore, creativity happens at the individual level as stated by Oldham and Cummings (1996). In addition, Amabile et al. (1996) argues that the starting point for innovation is the creativity by teams and individuals. Within this context, creative performance is commonly appraised with respect to the products being produced (Mumford et al., 2002). A creative product is one where a successful solution has been implemented to a novel, ill-defined problem (Mumford et al., 2002). The focus of most studies, however, has been on the processes people apply in generating these products (Mumford et al., 2002). Therefore, Amabile et al. (1996, p.1155) argue that “creativity is the seed of all innovation”. In addition, psychological perceptions of innovation (the implementation of people's ideas) within an organisation are likely to influence the motivation to generate new ideas (Amabile et al. 1996). Mumford et al. (2002) distinguish between two key sets of processes that appear to be involved in creative work: creative processes or the activities underlying initial idea generation, and innovation processes or the activities underlying the implementation of new ideas.

The word innovation is derived from the Latin word *novus*, or new, and is alternatively defined by Gopalakrishnan and Damanpour (1994, p-95) as “a new idea, method or device or the process of introducing something new”. As mentioned above, Amabile et al. (1996) define creativity as the production of novel and useful ideas in any domain, and define innovation as the successful implementation of creative ideas within an organisation. Based on that, Amabile et al. (1996) argue that creativity by individuals and teams is a starting point for innovation. The first is a necessary but not sufficient condition for the second. De Jong (2006) argues that the concept of innovation was for the first time considered by Schumpeter (1934) who viewed innovation as a process that involves creation of new brand, products, services, and processes and recognition of its impact on economic development. Many scholars have examined innovation as a concept from different point of view. Mexias and Glynn (1993, p.78) define innovation as “non routine, significant, and discontinuous organisational change that embodies a new idea that is not consistent with the current concept of the organisation's business”. Organisational innovation is viewed as formation of novel, important, and useful products or services in organisational environment (Gumusluouglu and Ilsev, 2009). Suranyi-Unger (1994) defines organisational innovation as the introduction of any new product, process, or system into an organisation. Sarros et al. (2008), Abbasi and Zamani-Miadeshti (2013)

view innovation as an outcome of various antecedent organisational factors or determinants, namely, transformational leadership and organisational culture. Based on above discussion, researchers found the factors i.e. followers' creativity, organisational innovation, empowerment, support for innovation, intrinsic motivation have one or other way supportive relations with transformational leadership.

2.3.1. Transformational Leadership and Followers' Creativity

Literature of organisational behaviour shows an increasing interest to examine factors that promote employees creativity, which involves creation of new and useful ideas concerning products, services, processes, and procedures in organisations (Amabile, 1988; Amabile et al., 1996; Oldham and Cummings, 1996; Zhou, 1998). One of the significant factors that play a major role in enhancing employees' creativity is the style of leadership (Scott and Bruce, 1994; Tierney et al., 1999; Dess and Picken, 2000). That is because, according to Redmond, et al. (1993), leaders play the most central role in the workplace.

There are different ways that leaders can affect their followers' creativity as identified by many studies. For instance, leaders can articulate a vision demonstrating long-term rather than over short-term goals for organisation and through that, they lead individual and joint efforts of their followers in the direction of innovative work processes and outcomes (Amabile et al., 1996). Moreover, leaders are the main determinant of organisational culture (Schein, 1992; Biswas 2009; Abbasi and Zamani-Miadeshti (2013).

Furthermore, transformational leadership is the style of leadership that has been proved its relation to creativity (Sosik et al., 1998, 1999). In this specific style of leadership, the behaviour of leaders is usually described as a driving force for creativity for the following three reasons (Gracia-Morales et al., 2012; Si and Wei, 2012). (1) Individualised consideration will act as a reward for followers through recognising and motivating them. (2) Intellectual stimulation will improve followers' exploratory thinking through supporting innovation, autonomy, and challenge. (3) Inspirational motivation will stimulate the followers' process of idea generation through encouraging followers to work in consistence with the vision of the organisation. Moreover, Bass (1990) explains that transformational leaders enhancing their followers' self-efficacy can make a positive impact on their creativity. That is because followers feeling of self-efficacy increase their creative (Wang et al., 2010; Lee, 2011; Walumba and Hartnell, 2011; Gracia-Morales et al., 2012). There is another force for encouraging creativity of followers that is used by

transformational leaders, which is the emotional relationships. According to Bass (1990), one of the main characteristics of transformational leaders is that they build emotional relationships with their followers. Those relationships as argued by Hunt et al. (2004) are expected to lead to a higher level of creativity.

2.3.2. Transformational Leadership and Organisational Innovation

Innovation is defined by Amabile et al. (1996, p.1155) as “*the successful implementation of creative ideas within an organisation*”. Thus, innovation is the total creative processes and outcomes of an organisation as whole. According to Oldham and Cummings (1996), innovation is at the organisational level. Consequently, innovation is based on individuals’ creativity. According to Amabile et al. (1996), the starting point for innovation is the creativity by teams and individuals.

Reviewing the literature on the relationship between leadership style and organisational innovation reveals that there is a positive relationship between them. Redmond et al. (1993) examined this relationship and found that followers showed a higher level of creativity when their leaders encouraged constructive problem solving and boosted their followers’ self-efficacy. In the same context, Scott and Bruce (1994) found a positive effect of the role expectations of a supervisor on his/her followers’ innovative behaviour. Oldham and Cummings (1996) also found that followers supervised in a supportive, non-controlling way, achieved a higher creative performance. Furthermore, based on the theory of leader–member exchange, Tierney et al. (1999) examining the ‘*quality of leader–follower relationship*’ found that it has a positive impact on their followers’ creative performance. In addition, Amabile (1998) also argues that leaders can influence their followers’ motivation and attitudes in their exchanges, at the same time, their total achievement at the organisational level through affecting the workplace context and organisational culture.

Based on different studies that proved the relation between transformational leadership and organisational innovation and on the above definition and elements of transformational leadership, transformational leadership promotes higher level of creativity and organisational innovation. This argument has been supported by many studies providing different explanations. One of those explanations is that transformational leaders engage their followers in personal value systems to reward them for required performance so they do not stick to exchanging contractual agreements (Bass, 1985; Gardner and Avolio,

1998). In addition, transformational leaders increase the enthusiasm of their followers to exceed self-interests for the sake of the organisation; raise the followers' awareness to the values and significance related to required outcomes; and heightened followers' expectations about their performance through articulating important vision and mission for the organisation as whole (House et al., 1991; Hsiao and Chang, 2011; Denti, 2012; Gracia-Morales et al., 2012; Noruzy et al., 2013). What is more, transformational leaders with their intellectual stimulation abilities, motivate their followers to think freely and adopt exploratory and generative thinking approaches (Sosik et al., 1997). According to Mumford et al. (2002), when transformational leaders apply a vision-based motivational process, this will improve organisational innovation. The reason behind this is that when transformational leaders adopt a vision demonstrating work aims and promoting this vision through project selection and evaluation and not through overt affective appeals, they will have a promulgated work-focused vision and that will improve followers' creative efforts (Mumford et al., 2002).

Transformational Leadership and Empowerment

Another important factor affecting followers' identified by Deci et al., (1989). creativity is psychological empowerment . Researchers proved that empowered employees are expected to show creative behaviour (Jung et al., 2003; Zhou, 1998). According to Jung and Sosik (2002), empowered employees have higher intrinsic motivation and that encourage creative endeavours. Furthermore, Sheldon (1995) emphasises on personal autonomy as a basic trait of creative individuals. Mumford and Gustafson (1988) argue that organisations supporting employees' autonomy will have more innovative achievements. Autonomy or freedom is one of the chief determinants of organisational innovation as it is proved that individuals displayed more creative performance when they left to their personal control over their way of completing their tasks (Amabile et al., 1996). Zhou (1998) found that when employees work in organisational climate that support task autonomy, they produce higher creative ideas.

Conger and Kanungo (1988) conceptualise empowerment as psychological enabling. They define empowerment as “*a process of enhancing feelings of self-efficacy among organisational members through the identification of conditions that foster powerlessness and through their removal by both formal organisational practices and informal techniques of providing efficacy information*” (Conger and Kanungo, 1988, p.474).

Thomas and Velthouse (1990) developed this concept further by describing power as energy: to empower is to energise. Thomas and Velthouse (1990, p-667) argue that empowerment is linked to “*changes in cognitive variables (called task assessments), which determine motivation in workers*”.

2.3.3. Transformational Leadership and Support for innovation

There is no doubt of the importance of organisations in influencing employees’ creativity (Eisenbeib and Boerner, 2013). Two main things control the organisation support for individuals’ creativity: organisational climate and culture.

Mumford and Gustafson (1988) argue that the organisational innovation is dependent on the availability of organisational climate supporting innovation. They explain further that even if individuals developed their ability for innovation, their readiness to carry out positive efforts may be subject to opinions regarding the results of these efforts in a specific situation (Mumford and Gustafson, 1988). Furthermore, Scott and Bruce (1994) argue that organisational climate is one of the most significant factors that influence innovation and creativity. They further argue that perceptions of employees on the extent of creativity support and the extent of creativity resource-allocation in the organisation have a significant effect on innovative performance. According to them, the organisational climate presents a “*sense-making*” tool and a leading principle of creative methods leading to more innovative products and services (Scott and Bruce, 1994). Moreover, according to Yukl (2001), Abbasi and Zamani-Miadeshti (2013), if an organisation culture does not allow making any mistakes or concern much about innovation, its employees will be unenthusiastic to take creative initiatives in their job even though they have autonomy.

Organisational climate and culture are the common societal instruments that leaders use to exercise control and power (Mumford et al., 2002; Biswas, 2009; Abbasi and Zamani-Miadeshti, 2013). According Jung (2001), leaders play a major role in the organisational culture development, transformation, and institutionalisation. In the same context, Schein (1992) argues that since leaders communicate based on their beliefs, those personal beliefs become a key component of the organisation’s climate and culture. What is more, leaders can create a supporting climate in their organisations (Eisenbeib and Boerner, 2013).

Based on transformational leadership concept, transformational leaders can stimulate and change followers’ tendency towards creative perspectives for a long term (Bass and Avolio, 1997). Studies examined this effect found evidence that organisation climate supporting innovation is a significant determinant of individuals’ creativity. Jung et al.

(2003) examined the relationship between transformational leadership and organisational climate that support innovation. They averred that transformational leadership has a clear-cut effect on innovative organisational climate. In addition, Koene et al. (2002) found a positive effect of “*charismatic*” leadership and significance on organisational climate. Further research done in four Australian establishments with large projects on research and development projects by Bain, Mann, and Pirola-Merlo (2001) examined six indicators of innovation such as supervisory ratings and found a significant relationship between them and organisational climate for innovation. Another study conducted by Scott and Bruce (1994) examined scientists and engineers in the R&D division in a large US company and found that organisational climate that support innovation lead to increasing innovative behaviour. They found that leader–follower exchanges positively associated with innovation support (Scott and Bruce, 1994). They also found that support for innovation has a positive association with innovative behaviour of employees (Scott and Bruce, 1994).

2.3.4. Transformational Leadership and Intrinsic Motivation

Intrinsic motivation is an essential element of creativity in organisations (Amabile, 1988, 1998). According to the theory of intrinsic task motivation, employees being attracted to and interested in the task itself allow them to be creative by searching for new and better ways of doing things (Amabile et al., 1996). Researchers who empirically investigated the relation between creativity and intrinsic motivation found that intrinsically motivated employees show additional creative accomplishment (Li and Hung; 2009; Wang et al., 2010; Lee, 2011). Therefore, the theory of intrinsic motivation has been the base for research investigating creativity (Amabile, et al. 1996; Oldham and Cummings, 1996; Shalley, 1995; Zhou, 1998).

Intrinsic motivation means the motivational condition of the worker and what draws him/her to a particular job excluding the peripheral incentives that may be gained from performing this task (Deci and Ryan, 1985). The theory of intrinsic motivation argues that the motivation of employees to carry out a task can be intrinsic or extrinsic. Employees having the intrinsic motivation are more likely to be flexible and persevering (McGraw and Fiala, 1982; McGraw and McCullers, 1979).

Employees to be creative require leadership support. Leaders can play an important role in enhancing followers’ creativity through understanding them and giving them support, and encouragement and that will make them to concentrate on their tasks rather than on extraneous worries and fears, and to take initiative of exploring and experimenting new

ideas and approaches (Amabile, 1996; Deci and Ryan, 1985). Furthermore, the theory of intrinsic motivation states that situational factors such as leadership affect creativity through its influence on intrinsic motivation (Amabile, 1988; Oldham and Cummings, 1996; Eisenbeib and Boerner, 2013). Researchers regarded intrinsic motivation as a mechanism that through it leadership can affect creativity (Amabile, 1988; Oldham and Cummings, 1996). Based on the definition of transformational leadership, it can be noticed that it leads to a positive impact on the followers' creativity through strengthen their intrinsic motivation. Moreover, according to Oldham and Cummings (1996), one of the significant determinant factors of intrinsic motivation and creativity at work is supportive supervision. Transformational leaders demonstrate this supportive supervision when they take care of the emotional state and necessitates of their followers, encourage them to develop their skills, advise them on how they can attain their ambitions , and show self-confidence in their abilities. That in turn will affect their intrinsic task motivation positively. In addition, transformational leaders demonstrate the individualised considerations by concentrating on enhancing their followers' skills, facilitating the transfer of resources and information, and granting them discretion to act (Avolio et al., 1999; Bass, 1985). As a result, followers will have a positive attitude to apply new and various approaches to their job, to work independently. In the review literature, there is an indirect relationship between transformational leadership and creativity through the intrinsic motivation as explained above. Only few studies examined mediating role of intrinsic motivation in the relation between creativity and transformational leadership. One of those studies, the study of Shin and Zhou (2003) who conducted an empirical study to examine this relationship, and they found that the intrinsic motivation plays a partial mediating role in influencing followers' creativity by transformational leadership. Shin and Zhou (2003) argue that the intrinsic motivation mediates this relationship in full in the case of employees valuing security, conformity, and tradition.

The intrinsic motivation of followers can be enhanced when they feel an improvement in their skills and abilities, and view an increase in their personal discretion and responsibility (Deci and Ryan, 1985; Zhou and Oldham, 2001). This enhancement in the followers' intrinsic motivation leads to a higher level of creativity (Amabile, et al. 1996;). This increase in the followers' enthusiasm, power, and attentiveness that results from being intrinsically motivated, will more probably accompany with a higher level of creativity (Amabile, et al. 1996). Finally, all those efforts undertaken by leaders lead to increasing in the interest of the task itself along with more creative achievements (Amabile, 1983; Eisenbeib and Boerner, 2013).

2.3.5. Transformational Leadership and Organisational Learning

To obtain the goals of an organisation, transformational leadership affect the attitudes and behaviours of employees. In literature leadership, style has been focused as one of the important factor to influence the individuals on employee creativity. Organisation leaders can influence directly by introducing new ideas and set specific goals to encourage individuals. It influences employees' performance through their influence and understanding of the process (Yulk, 1999). Thus, transformational leadership style, which concentrates on longer-term goals, value and emphasising developing a vision and inspiring followers, can induce employees more than to transactional leadership style for generating high performance (Howell and Avolio, 1993 and Garcia-Morales, et al., 2008). In an organisation, skills and knowledge that enhance the capability, creativity, and performance of employees can be acquired through absorptive capacity to build organisational performance. Knowledge and skills circulation through experimentation, communication, and dialogue create creativity among individuals. This learning concept promotes individuals to build up new skills and knowledge to transmit effective actions and improvement for an organisation. There is a support in the literature regarding organisational learning that can be promoted by transformational leadership (Tushman and Nadler, 1986 and Garcia-Morales, et al., 2008; Camps and Rodriguez, 2011; Hsiao and Chang, 2011; Gracia-Morales et al., 2012; Abbasi and Zamani-Miadeshti, 2013; Noruzy et al., 2013) and support to followers' creativity (Weisberg, 1999). Many current studies such as Aragon-Correa et al. (2007) conducted in large four sectors organisation of Spain supported that the transformational leadership has positive and significant relationship with organisational learning. By testing a theoretical model in 408 Spanish organisations, Morales-Garcia (2008) supported the relationships between transformational leadership and organisational learning.

2.3.6. Transformational Leadership and Workplace Relationship

Transformational leadership affects individual's performance by his or her attitudes, behaviours, and performance (Bass, Avolio, and Berson, 2003). Indeed, it influences employee's job performance and many researchers such as Judge and Piccolo (2004) and Piccolo and Colquitt (2006) used the relationship between these variables instead of using relational relations. The relationships that employees establish at their workplace with their supervisors and co-workers represent social exchange relationships (Li and Hung, 2009, p-1130). Thus, using relationship based variables instead of individual attitudinal or job

characteristics variables are more important to know the behaviour of individuals. In research co-workers, relationship matter has been focused as an alternative influence on employee's work attitudes and performance (Steers, 1989). In the literature, very rare research has been conducted to know the leader-member and co-workers relationships (Sherony and Green, 2002). Researchers like Li and Hung (2009, p-1131) stated that the leader-member relationship is indicative of a worker's social exchange relationship with his or her supervisor and is most commonly expressed by leader-member exchange quality.

2.4. Research Studies in Transformational Leadership

In the above discussion, leadership has been considered as the act of influencing and behavioural activities of an organisation group to motivate and influence employees towards the attainment of specific organisational goals. In the literature of leadership, transformational leadership has been reviewed as a source of encourages innovation and creativity which have positive impact on learning, motivation, source of support, enhancing employee performance. A growing number of studies have been reviewed (see Table 2.1) and mainly supported the impact of transformational leadership to improve followers' creativity and organisational innovation.

Jung et al. (2003) examined the role of transformational leadership in enhancing organisational innovation. Through survey method, researchers collected data from 32 Taiwanese companies in the electronic/telecommunications industry. Study results established a constant and progressive link amid transformational leadership and innovation. Results disclosed remarkable and promising relationships with empowerment and innovation-supporting organisational climate. Nevertheless, organisational innovation has a substantial nevertheless undesirable association with empowerment and has a significant and positive relation with innovation-support organisation climate.

Gong et al. (2009) concentrated on the link between the positioning of employee learning, transformational leadership, and employee creativeness through integrating the effectiveness of employee creativity. Main study data were collected from 277 insurance agents in Taiwan. By applying Hierarchical Linear Modelling to test hypotheses, scholars established that employee creativity was linked to worker's sales as well as their successes as evaluated by their supervisors. On the other hand, through facilitation of the worker's creative self-efficacy, the orientation of employee learning and transformational leadership were interrelated to employee creativity

Schriesheim et al. (2006) tested the path-goal and transformational leadership theory predictions at the individual level of analysis. By applying confirmatory factor analysis, hierarchical linear multiple regression and within and between entity analysis on a sample of 169 social services workers in 40 groups in New York, results confirmed no evidence supporting either the path-goal or additive augmentation hypotheses. However, a positive moderator effect was found for some transformational leader behaviours and the leader contingent reward behaviour variable, supporting a form of augmentation effect that is not incongruent with Bass's approach to transformational leadership.

Garcia-Morales et al. (2008) examined the effects of transformational leadership on organisational performance through knowledge and innovation.

Academics seek to fill the gap by examining the opinions of leaders hypothetically and empirically against varied variables that are in-between knowledge and innovation. They also studied the link between transformational leadership and organisational performance.

Based on the data from 408 Spanish organisations, results established that transformational leadership supports the improvement of the foundation of organisational knowledge in the organisation. Furthermore, transformational leadership helps to improve absorptive capacity [the ability to assimilate] and inefficient knowledge. In addition, results proved that the ability to assimilate also aids the attainment, transference, and use of implicit knowledge. Finally, transformational leadership touches on slack knowledge, the ability to assimilate, implicit knowledge, organisational learning, and innovation that allow the creation of positive synergies that improve organisational performance.

Gumusluoglu and Ilsev (2009) investigated the impact of transformational leadership on organisational innovation to determine whether internal and external support for innovation as contextual conditions influence this effect. Researchers tested hypotheses through the data obtained from 163 research and development employees as well as 43 executives from micro and macro-sized Turkish software development establishments. The outcome supported the categorical influence of transformational leadership on organisational innovation. Results proved that the external support for innovation was found to moderate this effect significantly.

Precisely, the connection between transformational leadership and organisational innovation was greater with an enormous support from peripheral factors than when there was no external support. Furthermore, their study showed that transformational leadership is an essential factor of organisational innovation and urges leaders to absorb transformational leadership behaviours to encourage organisational innovation.

Kahai et al. (2003) investigated impacts of “*leadership style, anonymity, and rewards on creativity-relevant processes and outcomes*” in an electronic meeting system context on a group of thirty-nine scholars in a laboratory trial. Findings highlighted the socio-technical nature i.e. leadership and rewards effects on creativity relevant group processes and outcomes in an electronic meeting system. Evidence of “*social loafing*” was noticed i.e. obscurity indicated subordinate involvement and support in the condition of group incentives comparative condition of the individual incentive whereas social loafing was limited to the restriction of transactional leadership. Finally, transactional leadership was associated with greater group efficacy and solution originality than transformational leadership.

Amabile et al. (2004) conducted an exploratory study on leader behaviours related to perceived leader support, encompassing both instrumental and socio-emotional support. By applying qualitative approach, researcher analysed based on daily diary narratives written by subordinates. Enlightening on both effective and ineffective forms of leaders’ behaviour, researchers focused on specific leader behaviours and had significantly predicted leader support. Results showed affective and subordinate perceptual reactions to this behaviour. Finally, results showed both positive and negative spirals of leader behaviour, subordinate reactions, and the subordinate creativity.

Sosik et al., (1998) researched the outcomes of high-level and subtle stages of transformational leadership (four factors i.e. fluency, flexibility, originality and elaboration) on a group's creativity under unidentified and recognised automated brainstorming environments. Results from one hundred and fifty-nine undergraduate students at a public university in the Northeast show that groups functioning below advanced stages of transformational leadership produced additional idea explanations and novel results than those operating in lesser levels of transformational leadership. Likewise, unidentified groups were further malleable in creating viewpoints than recognized groups.

Lee et al. (2011) conducted an empirical study of transformational leadership, team performance, and service quality in retail banking. Using data collected from 192 employees of retail banks in Macau, China, researchers investigated five dimensions of transformational leadership. These are idealised influence (attributed), idealised influence (behaviour), intellectual stimulation; inspirational motivation and individualised consideration have an impact on team performance with respect to team cohesion, team leader, job satisfaction and team competence. Result implies that leadership and service quality were not directly associated with but mediated by team performance.

Camps and Rodriguez (2011) examined the mediating role of organisational learning capability and employability in the relationship between individual performance and transformational leadership. Researchers collected data from a sample of 795 workers from seventy-five university departments. By applying multilevel path analysis with a two-level data structure, results showed that a positive affiliation between the workforces observed organisational learning capability and employability perception. Results also showed a progressive connection between transformational leadership and the measurement of being able to be employed. In addition, results showed that the individual performance have a significant influence on the group.

Garcia-Morales et al. (2012) investigated the influence of transformational leadership on organisational functioning through organisational learning and innovation. Researchers conducted this study on a sample of 168 Spanish firms and results revealed that transformational leadership have positive and significant influence on organisational performance through organisational innovation and learning. In addition, results showed that organisational learning influences positively and significantly on organisational performance through organisational innovation and finally confirmed that organisational innovation have also positively and significantly influence on organisational performance.

Si and Wei (2012) examined the relationship of transformational and transactional leaderships, empowerment, and innovative performance in a large multinational company based in China. Results obtained from 93 teams, including 465 team members and 93 team supervisors. By applying hierarchical linear modelling, researchers have found positively, and significantly relationship of transformational leadership and team empowerment the climate with subordinates' creative performance. However, team empowerment performed moderated role between leadership and subordinates' creative performance.

Eisenbeib and Boerner (2013) investigated the positive and negative effects of transformational leadership followers' creativity. Data were gathered from the workers of a German organisation in which sample were 416 R&D employees. Results showed that transformational leadership promotes followers' creativity. However, this relationship increases followers' dependency, which can affect to creativity in terms of reduction. Researchers revealed that such negative indirect effect support to the positive influence of transformational leadership on followers' creativity.

Sheikha, Newmanb, and Al Azzeh, (2013) examined the relationship of job involvement and transformational leadership and job involvement directly and through the moderating

role of individually held cultural values in the Middle East. By applying hierarchical regression analysis based on data from 229 employees from ten organizations in the United Arab Emirates, (UAE) results showed that transformational leadership have a positive influence on job involvement. Furthermore, research confirmed the influence of the cultural value orientations of individuals as a moderator to the relationship of job involvement and transformational leadership. However, data showed that collectivism was positively influenced the relationship between job involvement and transformational leadership.

Noruzi et al. (2013) examined the relations between transformational leadership, organisational innovation, knowledge management, and organisational learning. For this study 280 samples from 106 companies were collected included executives, seniors, administrative and others. Researchers found that transformational leadership have positive and significant influence on knowledge management and organisational learning. By applying structural equation modelling, researchers confirmed the positive and significant relationship of transformational leadership on organisational innovation and organisational performance of manufacturing companies. Finally, researchers concluded that transformational leadership have positive but indirect influence on organisational innovation through knowledge management and organisational learning.

On the basis of theories and numerous models of transformational leadership and previous studies (Gong et al., 2009; Gumusluoglu and Ilsev, 2009; Si and Wei, 2012; Noruzi et al., 2013), transformational leadership was considered as effective contextual factors on followers' learning and organizational innovation in public sector organisation of Kingdom of Saudi Arabia. In this literature, transformational leadership has been connected with numerous outcomes such as individual, group and organisational outcomes with reference to attitudes, behaviours, and performance. According to Avolio (2011, p. 49) "people are more committed to their work, more highly engaged, and more satisfied." The majority of above researchers focussed on followers' reactions to transformational leadership in their supervisors, team empowerment, knowledge management, creative performance, and employability perceptions. However, transformational leadership must support to create a situation in which, followers constantly increase their skills, knowledge, and capabilities to make visions, creativity, develop shared mental models, recognise organisational complexities and make learning. Investigating the transformational leadership factors related to employee creativity and organisational innovation is limited in the literature and researcher Like Gumusluoglu and Ilsev (2009) claim that earlier results were irreconcilable

as a result, more studies in the context of actual setting are desirable. In the line with the actual setting, findings of the studies of Shin and Zhou (2003) and Gumusluoglu and Ilsev (2009) revealed a progressive link among followers' creativity and transformational leadership. Individual creativity in an individualist culture is much more investigated but in a collectivist culture studies are limited. Researchers like Gumusluoglu and Ilsev (2009) tried to examine this relationship in a collectivist culture like Turkey, but its impact in Gulf countries may be different. Therefore, the researcher is focusing to develop a conceptual model which can be tested in a Gulf country for generalisation.

In the model of Gumusluoglu and Ilsev (2009) mediating effects were tested through “*intrinsic motivation, psychological empowerment, organisational learning and support for innovation*”. These factors are associated with the individual and psychological perception basis of employees but in a collectivist culture social relationship factor takes importance for the transformational leadership. In the literature, organisational, cultural and social factors are more involved with the individuals and leadership (Mumford and Gustafson, 1988; Scott and Bruce, 1994; Yukl, 2001; Biswas, 2009). Thus, social relationship at workplace can support followers' creativity where climate and culture have been found important in the context. Therefore, the model given by Gumusluoglu and Ilsev may not be provided appropriate results in the collectivist approach. Tierney and Tepper (2007) witnessed that employees can get influenced through the co-workers and leaders interaction at their job.

Leadership is one of the important factor which deals with the diverse mix of employees. In this context transformational leadership plays an important role helping followers to coordinate with each other effectively to increase followers' satisfaction level (Shibru, 2011). The literature witnessed that transformational leadership has positive and significant impact on employees' behaviors (Al-Swidi et al., 2012). Evidence from cutting-edge investigations, established a relationship between transformational leadership and the following concepts. These are job satisfaction and organizational commitment (Pillai et al., 1999), job performance (Bass et al., 2003), turnover (Chan, 2005), withdrawal behaviors (Walumbwa, 2005), organizational effectiveness (Moore, 2008), job motivation (Macey and Schneider, 2008), organisational innovation, knowledge management, and organisational learning (Noruzy et al., 2013), dispositional traits (Eisenbeib and Boerner, 2013), learning organisational culture (Abbasi and Zamani-Miandashti, 2013), contingent reward Breevaart et al., 2014). In the previous literature, researchers have investigated the

impact of leaders to encourage employees for thinking of new ways to get the solution of problems (Moss and Ritossa, 2007; Garcia-Morales et al., 2008; Vinkenbunrg et al., 2011; Loughlin et al., 2012). Thus, it is main questions for the current researchers that how leaders encourage employees to think of new ways? To this extent, employees' individual creativity and organisational innovations are important outcomes of the leadership to the success.

Based on the above studies, it can be concluded that transformational leadership have positive and significant relationship to enhance the followers' creativity and organisational innovation. In the literature many studies such as (Garcia-Morales et al. 2008; Gumusluoglu and Ilsev, 2009; Garcia-Morales et al., 2012; Noruzy et al., 2013; Eisenbeib and Boerner, 2013; Breevaart et al., 2014) have been focused on the impact of transformational leadership on followers' creativity and organisational innovation.

This research is going to conduct in the region of Middle East where cultural and political borders are not limited. Middle Eastern countries always rely on high degrees of power distance and uncertainty avoidance because of they follow rigid hierarchal socio-cultural systems. According to Hofstede & Hofstede (2005); Hofstede et al. (2010), these nations follow laws, regulations and control to reduce the amount of uncertainty. However, they are enjoying with the oil wealth and power that also permitted to grow society. Researchers support the tendency of justice, honesty and inspirational leadership who can earn loyalty among their followers (Kabasakal et al., 2012).The region is developing with technology, industrial, financial and retail economy (Yousef, 2004). Domain researchers of that area are very much concerned to introduce human resources and organisational development for getting success (Robertson, Al-Habib, Al-Khatib and Lanoue 2001). To this extent leadership is one of the important part to support to human resources management and few researchers have focussed it in the Middle East (Budhwar and Mellahi 2007; Metcalfe 2007; Suliman and Al-Junaibi 2010). Researchers are interested to focus the extent of Western leadership theories in the context of Middle East (Sheikha, Newmanb, and Al Azzeh, 2013).

Table 2.1: Research Studies in Transformational Leadership

Description	Author's Name (s) & Years	Place	Findings
Transformational Leadership and Dimensions of Creativity: Motivating Idea Generational in Computer-Mediated Groups	Sosik, J. J., Kahai, S. S., and Avolio, B. J. (1998)	USA	Results showed that groups working in advanced stages of transformational leadership produced additionally enriched knowledge and novel results than those operating in lesser. Undisclosed groups were further pliable in creating viewpoints than recognized groups. Results also showed an important leadership style regarding anonymity interaction for flexibility.
An Examination of Leadership and Employee Creativity: The relevance of Traits and Relationships	Tierney, P. A., Farmer, S. M., and Graen, G. B. (1999)	USA	Results suggest that employee intrinsic motivation and cognitive style, leader-member exchange, the interaction between employee intrinsic motivation and leader intrinsic motivation and between leader-member exchange and employee cognitive style relate to employee creative performance.
Transformational and Transactional Leadership and Their Effects on Creativity in Groups	Jung, D. I. (2000)	USA	Results clearly supported that the participants in the transformational leadership condition and the nominal group condition outperformed their counterparts in the transactional leadership condition and the real group condition.
The role of transformational leadership in improving	Jung D. I, Chow, C. and Wu, A. (2003)	Taiwan	Results indicated that transformational leadership has substantial and progressive relationships together with

organisational innovation: Hypotheses and some initial findings			empowerment and promotion for innovation. Further empowerment has extensive nevertheless undesirable relations with organisational innovation, whereas the support for innovation has a positive relationship.
Effect of Leadership style, anonymity, and rewards on creativity-relevant processes and outcomes in an electronic meeting system context	Kahai, Surinder. S., Sosik, J. J. And Avolio B. J. (2003)	USA	Results found that obscurity indicated subordinate involvement and support in the condition of group incentives comparative condition of the individual incentive whereas social loafing was limited to the restriction of transactional leadership
Transformational Leadership, Conservation, and Creativity: Evidence from Korea	Shin, S. J. AND Zhou, J. (2003)	Korea	Transformational leadership was positively linked to follower creativity and followers' "conservation" a value, controlled than relationships, and intrinsic motivation mediated the involvement of the interface of transformational leadership and conservation and partly mediated the involvement of transformational leadership to creativity.
Transformational learning theory and implications for human resource development	Brooks. A. K. (2004)	USA	A conceptual paper revealed that the field of human resources development is related with learning and change to status quo within organisation. Further argued that transformational leadership contribute to advocating adaptive change within existing system.
Leader Behaviours and the Work Environment for Creativity:	Amabile, T. M., Schatzel, E. A., Moneta, G. B. and	USA	Specific leader behaviours had significantly predicted leader support, which illuminates both effective and ineffective

Perceived Leader Support	Kramer, S. J. (2004)		forms of leader behaviour. In addition, results revealed subordinate perceptual and affective reactions to leader behaviour from quantitative data. From qualitative data behaviour of two extreme team leaders in context overtime, revealing both positive and negative spirals of leader behaviour, subordinate reactions, and the subordinate creativity.
Leadership and Creativity: Understanding leadership from a creative problem solving perspective	Reiter-Palmon, R. and Illies, J. J. (2004)	USA	Creativity may necessitate solving problem and effortful cognitive process. Article reviews literature that may provide support that leader must understand the cognitive requirements of creative problem solving.
An investigation of path-goal and transformational leadership theory predictions at the individual level of analysis	Schriesheim, C. A., Castro, S. L., Zhou, X. and DeChurch, L. A. (2006)	USA	Research provided support that transformational leadership, subordinate performance, and satisfaction relationships occur at the individual level. However, leader contingent reward behaviour were obtained positive significant moderator. Additionally analysis indicated that traditional additive augmentation model of Bass (1985) and his associates were not supported, although positive interactive effects were obtained.
Leadership and Organisational Learning's Role on Innovation and Performance: Lessons from Spain	Aragon-Correa, J. A., Garcia-Morales, V. J., and Cordon-Pozo, E. (2007)	Spain	By applying structural equation model in a four large organisation, the research reveals that leadership had a strong, significant, and positive influence on organisational learning

			and indirectly affecting on innovation.
The Effects of Transformational Leadership on Organisational Performance through Knowledge and Innovation	Garcia-Morales, V. J., Llorens-Montes, F. J. and Verdu-Jover, A. J. (2008)	Spain	Researchers examined experientially that transformational leadership influences slack knowledge, absorptive capacity, tacit knowledge, organisational learning, and innovation. These variables stimulate the relationships between these provisional variables and authorises the conception of positive synergies that advance organisational performance.
Transformational Leadership and Organisational Innovation: The Role of Internal and External Support for Innovation	Gumusluoglu, L. and Ilsev, A. (2009)	Turkey	Study result authenticates positive impact of transformational leadership on organisational innovation. This positive impact was acknowledged in micro and small-sized establishments. Specially, the connection between transformational leadership and organisational innovation was sturdier when external backing was at great levels than when there was no external backing.
Transformational Leadership, Creativity and Organisational Innovation	Gumusluoglu L. and Ilsev. A (2009)	Turkey	Results showed positive relationship between transformational leadership and employee creativity and it influence employee creativity through psychological empowerment
Employee learning orientation, transformational leadership, and employee creativity: The mediating role of employee creative self-efficacy	Gong, Y., Huang, J. and Farh, J. (2009)	Taiwan	Findings revealed that employee creativity was positively related to employee sales and to supervisor-rated employee job performance. Employee learning orientation and transformational leadership were positively related to employee creativity, and those relationships were mediated by

			employee creative self-efficacy.
The influence of transformational leadership on workplace relationships and job performance	Li, C. and Hung, C. (2009)	Taiwan	Results indicate that all four dimensions of transformational leadership i.e. individualised consideration, inspirational motivation, idealized influence, and intellectual stimulation have positive effects on leader members relations, whereas only individualized consideration and inspirational motivation positively affect co-worker's relations. Results also found that leader-member relations are more efficacious predictor of organisational citizenship behaviour.
Transformational leadership, learning, and employability Effects on performance among faculty members	Camps, J & Rodri'guez (2010)	Spain	On the basis of 795 samples from 75 university departments, the hypothesis was tested. By using a multilevel path analysis that there is a positive relationship between worker-perceived transformational leadership of his/her leader and his/her employability perception. The worker's perception of his/her employability and his/her performance; transformational leadership, and individual performance have a significant influence on the group. While employability can be considered only as an individual phenomenon; and at group level, the effects of transformational leadership on performance are mediated by organizational learning capability.
Transformational leadership,	Camps, J. And Rodriguez,	Spain	Results found a positive affiliation between the workforce-

learning, and employability	H. (2011)		observed organisational learning capability and employability perception and performance. In addition, results revealed a positive link between transformational leadership and worker's perception of employability and performance.
An empirical study of transformational leadership, team performance and service quality in real banks	Lee, P. K. C., Cheng, T. C. E., Yeung, A. C. L. and Lai, K. (2011)	China	Results suggest that four out of five of the dimensions of transformational leadership. i.e. idealised influence (behaviour), intellectual stimulation, inspirational motivation and individual consideration have no impact on the team performance. Two out of three dimensions of team performance i.e. team competence and team leader job satisfaction has a significant impact on service quality.
Do Transformational leaders enhance their followers' daily work engagement	Tims, M., Bakker, A. B. Moreover, Xanthopoulou, D. (2011)	The Netherlands	Results supported that transformational leadership related positively to employees' daily engagement and day levels of optimism fully mediated this relationship. However, daily self-efficacy did not act as a mediator.
Transformational leadership influence on organisational performance through organisational learning and innovation	Garcia-Morales V.J., Jimenez-Barrionuevo M.M., Gutierrez-Gutierrez, L. (2012)	Spain	Results found that transformational leadership is positively and significantly related to organisational performance through organisational innovation and learning. However, organisational learning influences positively and significantly on organisational performance through organisational innovation. Results also found that organisational innovation also have positive and significant influence on organisational

			performance.
Transformational and transactional leadership, empowerment climate, and innovation performance: A multilevel analysis in the Chinese context	Si S. and Wei F. (2012)	China	Data from 93 teams, including 465 team members and 93 team supervisors of a multinational company based on a China showed the positively and significantly relationship of transformational leadership and the team empowerment climate with subordinates' creative performance. By applying hierarchical linear modelling, researchers found that team empowerment performed moderated role between leadership and subordinates' creative performance.
A Double-edged Sword: Transformational Leadership and Individual Creativity	Eisenbeib S.A. and Boerner S. (2013)	Germany	This study is based on data that is collected from the sample of 416 R&D employees. Researchers found that transformational leadership promotes followers' creativity, but this relation increases followers' dependency and, however that can affect negatively to employee creativity.
Relations between transformational leadership, organisational learning, knowledge management, organisational innovation, and organisational performance: An empirical investigation of manufacturing firm	Noruz A., Dalfard V.M., Azhdari B., Nazari-Shirkouhi S., and Rezazadeh A. (2013)	Iran	From 280 samples of 106 companies, results showed that transformational leadership have positive and significant influence on knowledge management and organisational learning. However, transformational leadership has positively and indirectly influenced organisational innovation through knowledge management and organisational learning. Researchers also confirmed the positive and significant relationship of transformational leadership on organisational

			innovation and organisational performance of manufacturing companies.
Daily transactional and transformational leadership and daily employee engagement	Breevaart, Bakker, Hetland, Demerouti, Olsen, and Espevik (2014)	Norway	By applying Multilevel regression getting data from travelling by sail ship, 61 naval cadets, results showed that the contingent reward and transformational leadership contributed to a more autonomy and support for followers' daily work engagements. However, management by exception has less favourable for work environment.
Consideration for future consequences as an antecedent of transformational leadership behavior: The moderating effects of perceived dynamic work environment	Wenhui Zhang, Hui Wang, Craig L. Pearce (2014)	China	This study is examined the impact of the consideration of future consequences on leadership effectiveness, transformational leadership behavior and potential moderating effects of perceived dynamic work environment in the relationship. The results confirmed positive relationship with leadership effectiveness and transformational leadership. Further, this research moderates the connection between transformational leadership and perceived dynamic work environment. Finally, the impact of the consideration of future consequences on leader effectiveness is entirely mediated by transformational leadership behaviour under low versus high perceived dynamic work environment.
Innovation in top management teams: Minority dissent,	Berger-Selman, F. and De	Netherland	This study proposed that transformational leaders create a psychologically safe team climate, in which dissenting

transformational leadership, and radical innovations	Dreu, C. K. W. (2014)	opinions are used effectively to create radical innovations. Based on data received from Members of 36 top management teams ($N = 196$) results showed that minority dissent was positively related to the number of innovations implemented by top management teams. Further results confirmed that the innovation has been possessed only high levels of transformational leadership.
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Source: Developed by researcher for this study

2.5. Research Gap

Literature advocates that leaders can directly influence followers' creativity directly (intrinsic) and indirectly (extrinsic), (Tierney et al., 1999; Jung et al., 2003; Gumusluoglu and Ilsev, 2009; Breevaart et al., 2014). A number of empirical studies also bring to light that awareness of support for innovation and psychological empowerment is a key foundation of employee creativity (Tierney et al., 1999; Gumusluoglu and Ilsev 2009; Garcia-Morales et al., 2012; Noruzy et al., 2013; Eisenbeib and Boerner, 2013). Based on the above literature, the researcher has revealed that transformational leaders encourages their followers, organisational performance and develops an innovative environment. It is argued that there is a dearth in research of mediating tasks of empowerment and innovative environment in the connection between transformational leadership and followers' creativity. These researchers filled this gap and conducted a study in the context of micro and small sized Turkish software development companies. Following this gap, the researcher extends above study and proposes that an employee belief for the support of "*innovation, empowerment, intrinsic motivation*", organisational learning, and workplace relationship is a way of triggering the impacts of transformational leadership on creativity. According to the literature, by transformational leadership, organisational learning promotes individuals to build up new skills and knowledge to transmit effective actions and improvement for an organisation (Tushman and Nadler, 1986; Weisberg, 1999; Garcia-Morales, et al., 2008; Camps and Rodriguez, 2011; Hsiao and Chang, 2011; Gracia-Morales et al., 2012; Abbasi and Zamani-Miadeshti, 2013; Noruzy et al., 2013; Breevaart et al., 2014). Instead of using individual attitudinal or job characteristics variables relationship variable, may be more important to know the behaviour of individuals. In the literature, few studies have been conducted to investigate the leader-member and co-workers relationships (Sherony and Green, 2002; Steers, 1989). First such type of transformational leadership and followers' creative is going to investigate on the basis of mediating factors such as employee perception of support for innovation, intrinsic motivation, organisational learning, workplace relationship and empowerment. Literature witnessed that if employees are empowered; have given support of creativity, and have higher intrinsic motivation; they will be encouraged to perform creative actions (Jung et al., 2003; Eisenbeib and Boerner, 2013). This research claims that employees' performance and social relationship along with empowerment, support of innovation and intrinsic motivation have a large impact on

followers' creativity and innovations. The researcher conducted this study in the region of Middle East country such as Saudi Arabia and according to the literature; this may be the first study with such theoretical framework and in the context of organisations of Saudi Arabia as well.

The region of Middle East is not confined to cultural and political borders (Budhwar and Mellahi 2007). This region is vastly developing economy not only based on oil resources but other as well (Yousef 2004). To the extent government of the relative countries are introducing policies and remedies according to the situation to diversify the economy into new dynamic industries such as financial, retail and information services (Robertson, Al-Habib, Al-Khatib and Lanoue 2001; Budhwar and Mellahi 2007). The consequences of these efforts are increasing large number of the world's Fortune 500 companies operating in the Middle East (Mellahi, Demirbag and Riddle 2011). Therefore, employers and policy makers realised to speed up the human resources development that is critical to achieving the organisational goals. In this region, policy makers are encouraging leadership amid of creating individual creativity and organisational innovation (Kabasakal and Bodur 2002). In this connection the focus of research scholars has been increased to know the factors that support to human resources in the Middle East (Aycan, Al-Hamadi, Davis and Budhwar 2007; Budhwar and Mellahi 2007; Metcalfe 2007; Suliman and Al-Junaibi 2010). Researchers witnessed about the dearth of literature to investigate the extent of Western leadership theories in the context of Middle East (Abdalla and Al-Homoud 2001; Sheikha, Newmanb, and Al Azzeh, 2013). Following this literature gap by focusing upon leadership to investigate the relationship of transformational leadership on followers' creativity and organisational innovation in the Middle Eastern organisational context, is the main purpose of this study. In this study, the research argues that transformational leadership will support in the development of organisational innovation and employees creativity. This research has significant implications with respect to effective transformational leadership role within Middle Eastern organisations.

2.6. Summary

From the literature, transformational leadership has been proved as an influence towards followers' behaviour and their creativity for the achievement of organisational goals. This chapter showed clearly the concept of leadership and notion of transformational leadership in the context of followers' creativity and organisational innovation. Literature review chapter has explored transformational leadership theory and their different dimensions i.e. charismatic role modelling or idealised influence, inspirational motivation, individualised consideration and intellectual stimulation. Through these dimensions, the researcher advocates that transformational leaders are individuals that motivate and encourage followers to attain organisational goals. Further, this chapter revealed the effect of transformational leadership on employee creativity and organisational innovation. In the literature, researchers argued that creativity is the seed of all innovation and innovation within an organisation are likely to impact the employee motivation. To this end the researcher followed the gap of literature to investigate the extent of Western leadership theories in the context of Middle East. This research has significant implications with respect to effective transformational leadership role within Middle Eastern organisations.

CHAPTER THREE: THEORETICAL FRAMEWORK

3. Introduction

The focus of this chapter is to examine existing literature on developing a theoretical framework. Literature advocates that leaders can directly affect followers' creativity and organisational innovation (Gumusluoglu and Ilsev, 2009). Literature reveals that less research has been conducted to examine the relationships between transformational leadership and follower's creativity through mediating factors. The importance of investigating the effect of mediating factor is to find motivational factors that leader provides intellectual stimulations to encourage followers to challenge the status quo and old ways of doing things. This argument is based on literature where authors claim that if employees are empowered, having support of innovation and have higher intrinsic motivation encourages to creative actions (Jung and Sosik, 2002; Sheldon, 1995). Given the importance to mediating effect, a study was conceptualised the connection between transformational leadership and follower's creativity through mediating factors such that employees' "*perception of support for innovation, intrinsic motivation and psychological empowerment*". Researchers found a mixed response of these mediating factors with the relationship (Shin and Zhou, 2003; Gumusluoglu and Ilsev, 2009). Following to the literature like Shin and Zhou (2003) and Gumusluoglu and Ilsev (2009) studies, the researcher proposes that an employee "*perception of support for innovation, intrinsic motivation*", learning, workplace relationship and empowerment is a way of initiating the impacts of transformational leadership on creativity in the organisation. The context of this study is employees in the public security sector organisations in the Kingdom of Saudi Arabia in connection of transformational leadership trends toward the followers' creativity and organisational innovation. In this study, the researcher considered eight main constructs as discussed in the theoretical framework chapter: transformational leadership, followers' creativity, organisational innovation, empowerment, intrinsic motivation, workplace relationship, organisational learning, and support for innovation in the proposed theoretical framework. The next section presents the development of the theoretical framework and hypotheses based on the literature gap.

3.1 Theoretical Framework

Today's organisations come across with rapid technological change, global economic environment, shortening product life cycle, globalisation, and widely access to information (Brett and Okumura, 1998; Tierney et al., 1999; Yukl, 2001; Hsiao and Chang, 2011; Gracia-Morales et al., 2012; Si and Wei, 2012). These factors support high product features and better services (Brett and Okumura, 1998). Thus, organisational growth chases to new trends future survival and reduced pressures on organisation need to look at followers' creativity and organisational innovation. In this situation, organisational innovation through employee creativity plays a significant position for success and competitive advantage of organisations (Drucker, 1985; Woodman et al., 1993). According to Amabile et al. (1996, p.1155), "all innovation begins with creative ideas." Having creative ideas and developing that beyond its initial state may support to positive implementation of new programs, new product introductions, or new services in the organisation.

Employees' innovation begins with creative ideas that lead to successful implementation of new ideas. Creativity is based on an individual level, which is defined "the production of novel and useful ideas in any domain" (Amabile et al., 1996, p.1155). However, starting point for innovation is the creativity, which is accounted for a creative product in an organisation. Therefore, researchers like Amabile et al. (1996, p.1155) argue "creativity is the seed of all innovation, and psychological perceptions of innovation (the implementation of people's ideas) within an organisation are likely to impact the motivation to generate new ideas. Mumford et al. (2002) distinguish between two key sets of processes that appear to be involved in creative work: creative processes or the activities underlying initial idea generation and innovation processes or the activities underlying the implementation of new ideas. For developing employee creativity for organisational innovation, the role of leadership is an important factor. In the literature, leadership is emerging as a new field for developing attitudes and behaviours in the organisation where position of leader acts as a boundary roles in the organisation. Stodgill (1950, p.3) defines leadership as "the process of influencing the activities of an organised group in its efforts towards goal setting and goal achievement." Tannenbaum, Weschler and Massarik (1961, p.24) define leadership as "the interpersonal influence, exercised in a situation, and directed, through the communication process, towards the attainment of specified goals." From this definition, influencing has been conceived as an interaction pattern, perception of followers and role relationships. It is

related to a stream of evolving interrelationships in which they are continuously evoking motivational responses from followers and modifying their behaviours as they meet responsiveness or resistance, in a ceaseless process of flow and counter flow (Burns, 1978). Given that, leaders often have a major degree of control over different prospects of followers' tasks. Thus, leadership is considered influencing factor to the primary attitudes and behaviours of the members of an organisation creating a collective mentality to achieve the organisation's goals.

In the leadership domain, transformational leadership has been known as a supporting tool to followers' creativity with respect of learning, interrelationships and performance (Gracia-Morales et al., 2008). It has been confirmed by authors such as Bass (1998; 1999), Eisenbeib and Boerner (2013) that followers' maturity level, creativity and satisfaction can be enhanced through transformational leadership. In a particular atmosphere, leaders provide facilities of growth to a higher level of motivation and morality to their followers. Many authors have found various predictor variables in the domain of leadership that enhanced the followers' creativity and organisational innovation (See Table 3.1).

Table 3.1: Summary of the Literature

Author's Name (s)	Year	Place	Variables Used	Findings
Sosik, J. J., Kahai, S. S., and Avolio, B. J.	1998	USA	Transformational leadership, creativity, idea generation	Results showed greater levels of transformational leadership produce more elaborate knowledge. Results also showed a substantial leadership type with regard to obscured interaction for flexibility.
Tierney, P. A., Farmer, S. M., and Graen, G. B.	1999	USA	Employee intrinsic motivation, employee creativity, Leader membership exchange, supervisor style, employee cognitive style	Positive results found between employee intrinsic motivation, leader-member exchange, and cognitive style to employee creativity.
Jung, D. I.	2000	USA	Transformational leadership, transactional leadership, creativity	Results supported that the participants in the transformational leadership condition and the nominal group condition outperformed their counterparts in the transactional leadership condition and the real group condition.
Jung, D. I, Chow, C. and Wu, A.	2003	Taiwan	Transformational leadership, organisational innovation, empowerment, support for innovation,	Positive results indicated among transformational leadership, empowerment, and support for innovation. Further extensive nevertheless undesirable, whereas the support for innovation has a positive relationship.
Shin, S. J. AND Zhou, J.	2003	Korea	Transformational leadership, followers' creativity, followers'	Positive relationship between transformational leadership and follower creativity was found. Further

			conservation, intrinsic motivation,	followers' "conservation" moderated the relationships between intrinsic motivation and transformational leadership and partially mediated between transformational leadership and creativity.
Amabile, T. M., Schatzel, E. A., Moneta, G. B. and Kramer, S. J.	2004	USA	Leader behaviour, perceived leader support, work environment creativity	Specific leader behaviours had significantly predicted leader support. In addition, positive subordinate perceptual and affective reactions found to leader behaviour.
Reiter-Palmon, R. and Illies, J. J.	2004	USA	Conceptual paper	Creativity support to solving organisational problems and effortful cognitive process. Leader must understand the cognitive requirements of creative problem solving.
Brooks. A. K.	2004	USA	Conceptual paper	Employee development is related with learning and change to status quo. Further argued that transformational leadership contribute to advocating adaptive change within existing system.
Avey, J. B., Hughes, L. W., Norman, S. M., and Luthans, K.W.	2008	USA	Positivity, Transformational Leadership, Empowerment, and Employee negativity	Transformational leadership is significantly related to feelings of empowerment and empowerment is significantly related to intention to quit. However, empowerment fully mediated the relationship between transformational leadership and intention to quit.
Aragon-Correa, J. A., Garcia-Morales, V. J., and	2007	Spain	Leadership, organisational learning, and firm innovation	Positive influence between leadership and organisational learning and indirectly affecting on innovation found.

Cordon-Pozo, E.				
Garcia-Morales, V. J., Llorens-Montes, F. J. and Verdu-Jover, A. J.	2008	Spain	Transformational leadership, organisational innovation, organisational performance, and innovation	Positive relationship found that transformational leadership affects slack knowledge, absorptive capacity, tacit knowledge, organisational learning, and innovation.
Jung, D., Wu, A., and Chow, C. W.	2008	Taiwan	Transformational Leadership and firm innovation	Results support the belief that a progressive association is present between transformational leadership by top managers and organisational innovation/
Garcia-Morales, V. J., Llorens-Montes, F. J. and Verdu-Jover, A. J.	2012	Spain	Transformational leadership, organisational performance, knowledge and innovation	Positive relationship found that transformational leadership affects slack knowledge, absorptive capacity, tacit knowledge, organisational learning. Further, innovation influences the relation between organisational performance and transformational leadership.
Gumusluoglu, L. and Ilsev, A.	2009	Turkey	Transformational leadership, employee creativity, psychological empowerment, intrinsic motivation, support for innovation and organisational innovation	Positive relationship between transformational leadership and employee creativity and organisational innovation found, and it influence employee creativity through psychological empowerment
Gong, Y., Huang, J. and Farh, J.	2009	Taiwan	Employee creativity, transformational leadership, job performance, employee learning,	Positive relations found between employee creativity and supervisor-rated employee job performance. Employee learning orientation and transformational

			employee creative self-efficacy.	leadership were positively related to employee creativity, and those relationships were mediated by employee creative self-efficacy.
Li. C., and Hung, C.	2009	Taiwan	Leader-member relationships, co-workers relationship, transformational leadership, task performance and organisational citizenship behaviour	Results support that two dimensions of transformational leadership such that individualised consideration and inspirational motivation positively affect co-worker's relationship.
Gumusluoglu, L. and Ilsev, A.	2009	Turkey	Transformational leadership, organisational innovation, internal and external support	Positive influence found between transformational leadership and organisational innovation. Further, the relationship between transformational leadership and organisational innovation was stronger when external support was at high levels than when there was no external support.
Eisenbeifs, S. A. And Boerner, S.	2010	Germany	Transformational leadership and Innovation	Transformational leadership has positive and significant relationships to the team innovation.
Zhang, X., and Bartol, K. M.	2010	China	Empowering leadership and employee creativity, psychological empowerment, intrinsic motivation and creative process engagement	Empowering leadership positively affected psychological empowerment, which in turn influenced both intrinsic motivation and creative process engagement. However, empowerment role identify moderated the link between empowering leadership and psychological empowerment.
Gill, A.,	2010	Canada	Transformational leadership and	Results revealed positive relationships between

Fitzgerald, S., Bhutani, S., Mand, H., and Sharma, S.		and India	employee desire for empowerment	employee desire for empowerment and transformational leadership.
Camps, J. And Rodriguez, H.	2011	Spain	Transformational leadership, learning organisation, performance	Positive relationship between workers-perceived organisational learning capability and transformational leadership.
Lee, P. K. C., Cheng, T. C. E., Yeung, A. C. L. and Lai, K.	2011	China	Transformational leadership, team performance, job satisfaction.	No positive influence of transformational leadership on the team performance. Team competence and team leader job satisfaction has a significant impact on service quality.
Garcia-Morales V.J., Jimenez- Barrionuevo M.M., Gutierrez- Gutierrez, L.	2012	Spain	Transformational leadership influence on organisational performance through organisational learning and innovation	Transformational leadership is positively and significantly related to organisational performance through organisational learning and innovation. Organisational learning influences positively and significantly on organisational performance through organisational innovation.
Eisenbeiß S.A. and Boerner S.	2013	Germany	A Double-edged Sword: Transformational Leadership and Individual Creativity	Transformational leadership promotes followers' creativity but this relation increases followers' dependency and, however, which can affect negatively to employee creativity.
Noruzy A., Dalfard V.M., Azhdari B., Nazari-Shirkouhi	2013	Iran	Relations between transformational leadership, organisational learning,	Transformational leadership has positive and significant influence on knowledge management and organisational learning. In addition, transformational leadership has

S., and Rezazadeh A.			knowledge management, organisational innovation, and organisational performance: An empirical investigation of manufacturing firm	positively and indirectly influenced organisational innovation through knowledge management and organisational learning. However, transformational leadership positively influenced on organisational innovation and organisational performance.
Daily transactional and transformational leadership and daily employee engagement	2014	Norway	Transformational leadership, contingent reward, active management by exception, followers daily work engagement.	Results showed that the contingent reward and transformational leadership contributed to a more autonomy and support for followers' daily work engagements. However, management by exception has less favourable for work environment.
Consideration for future consequences as an antecedent of transformational leadership behavior: The moderating effects of perceived dynamic work environment	2014	China	Consequences on leadership effectiveness, transformational leadership behavior, perceived dynamic work environment	Results of this study show that the consideration of future consequences has a positive relationship with leadership effectiveness and transformational leadership.
Innovation in top management	2014	Netherland	Innovation, top management team, Minority dissent,	This study that minority dissent was positively related to the number of innovations implemented by top

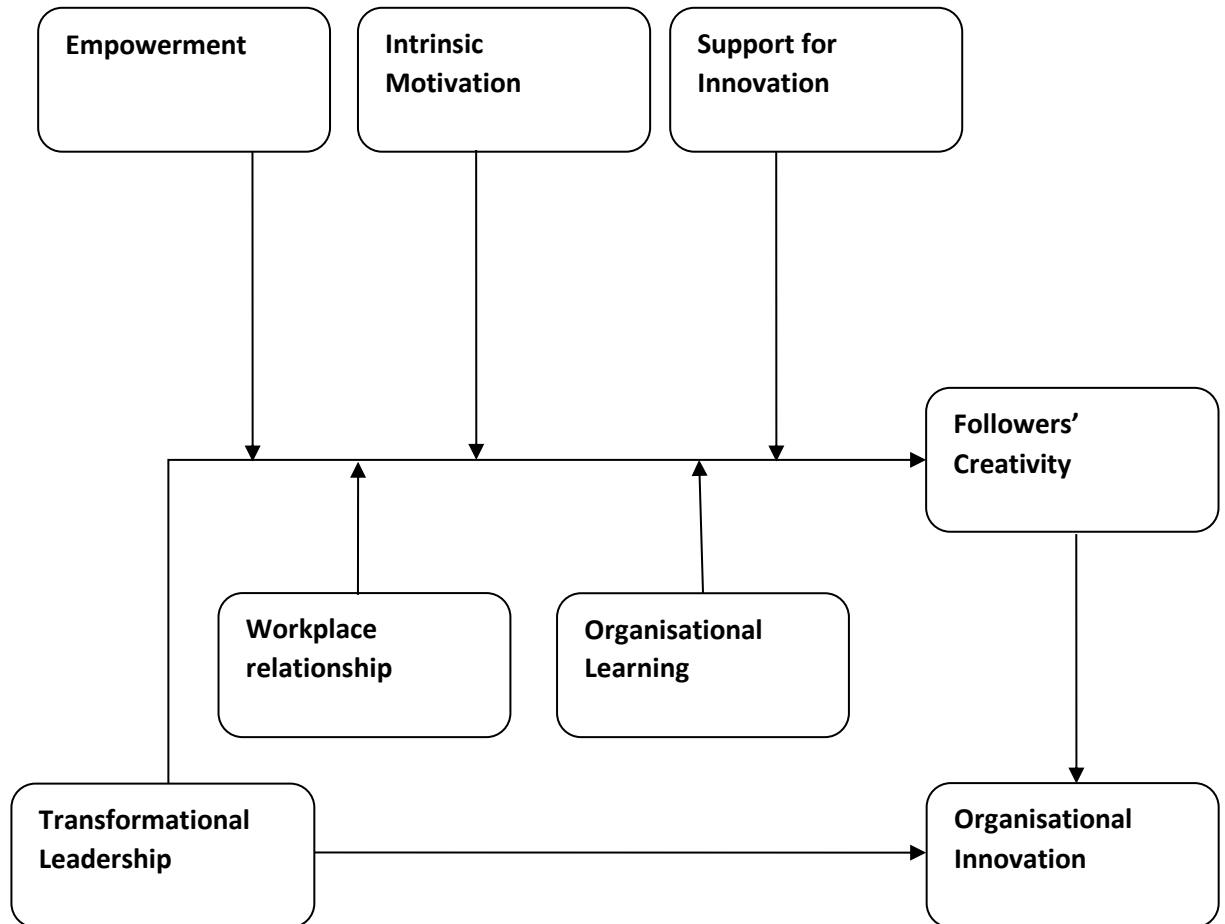
teams: Minority dissent, transformational leadership, and radical innovations			transformational leadership	management teams. Results showed that transformational leadership is the source of innovation.
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Source: Originated by the researcher

Literature reveals that transformational leaders have positive and significant relationships with their followers' creativity, organisational performance and innovative climate into the organisation (Gracia-Morales et al., 2008; Gumusluoglu and Ilsev, 2009; Garcia-Morales et al., 2012; Si and Wei, 2012; Noruzy et al., 2013; Eisenbeib and Boerner, 2013). From the above literature review (see Table 3.1), it is found that factors such as employee intrinsic motivation, employee creativity, leader-members exchange, supervisor style, employee cognitive style, employee learning, employee creative self-efficacy, contingent reward, inspirational motivation, co-workers relationships and job performance have been found to be interlinked with transformational leadership. From the literature, fewer studies have been found to investigate empirically the relationship among transformational leadership, followers' creativity and organisational innovation through mediation (Gumusluoglu and Ilsev, 2009). However, investigating the effect of mediating factor is important to find the followers' values that support to accept the influence of leaders and followers may be more receptive to the leaders' influence. Given the importance to mediating effect and following the research gap of authors such as Gumusluoglu and Ilsev, (2009), a study was conceptualised based on consideration of mediating role of "*motivation, empowerment, and innovative climate*" in the link between transformational leadership and followers' creativity. In their study, authors found a mixed response of these mediating factors towards the relationship between transformational leadership and followers' creativity. Following to the above authors, this study has been conceptualised to investigate the relationship between transformational leadership and followers' creativity on the basis of mediating factors such as employee "*perception of support for innovation, intrinsic motivation, empowerment*" along with learning, workplace relationship. These mediating factors might encourage followers to challenge the status quo and create a knowledge flow that generates competencies for the firm. In the literature, skills and knowledge received from the leadership can enable follower's competence, capability, and innovation for improvement of organisational performance (Nonaka and Takeuchi, 1995; Garcia-Morales et al., 2008; Gracia-Morales et al., 2012; Noruzy et al., 2013). In addition, leaders and members' relationship are linked with the positive approaches and behaviours with regards to the organisational goals. In an organisation, members and co-workers' relationships with leaders were classified as developing confidence and encouragement (Tierney and Tepper, 2007). From the literature, no such study were found to support the relationships between

transformational leadership and followers' creativity with the support of mediating factors of learning and social relationships. Following to literature, the researcher proposes that an employee "*perception of support for innovation, intrinsic motivation*", organisational learning, and workplace relationship is a way of triggering the impacts of transformational leadership on creativity and innovation (see Figure 3.1).

Leadership relies on the act of influencing and behavioural activities to induce followers acting in a desired manner (Gong et al., 2009). Authors argued it as a process rather than a fixed group of distinct actions (Burns, 1978). Leadership is a flow of developing interrelationships where they are constantly inducing followers to modify their behaviours. Literature discloses it as traits, behaviours, interaction patterns, role relationships, follower perceptions, exercise of influence, inducing compliance, a form of persuasion and power relation (Brass, 1990; Yukl, 1989). Thus, leadership has a major role over followers' attitudes and behaviours that is an important to foster employees' creative behaviour and performance (Mumford and Gustafson, 1988; Jung, 2001).

Figure 1.1: Theoretical Model

Source: Originated by the researcher

Transformational leadership has received large attention because it stimulates and inspires followers towards creativity and enhances organisational innovation. Thus, followers feel trust, admiration, loyalty, and respect towards their leaders. However, transformational leadership has been idealised towards influence, inspirational motivation, individualised consideration, and intellectual stimulation dimensions to followers' creativity and innovation (Tierney et al., 1999; Jung et al., 2003; Gong et al., 2009; Eisenbeib and Boerner, 2013; Breevaart et al., 2014). The focus of the leadership is on followers' creativity that may encourage both employee and organisation to promote inspiration, motivation and energise for an appealing vision of the future (Amabile, 1998; Jung, 2001).

For Zhou (1998) creativity involves the formation of new and useful ideas concerning employee services, processes, and procedures in organisations. Leaders play a significant role in enhancing employees' creativity at workplace (Dess and Picken, 2000). Many studies have been proved the nexus between transformational leadership and employees' creativity (Sosik et al., 1998, 1999; Elkins and Keller, 2003). In the organisation, innovation follows the creativity, which is related to the successful implementation of creative ideas within an organisation (Jung et al., 2003; Gumusluoglu and Ilsev, 2009). According to Amabile et al. (1996), the starting point for innovation is the creativity by teams and individuals. Researchers believe that followers have a higher level of creativity when their leaders encouraged constructive problem-solving and boosted their followers' to be empowered.

Literature supports the positive relationships between transformational leadership, employees' creativity, and innovation and top managers apply it for long-term performance (Geyer and Steyrer, 1998; Eisenbeib and Boerner, 2013). The literature reveals that many factors can affect to follower's creativity and support to innovations. In this regard, numerous factors such as creativity, leader-member exchange, supervisor style, support for innovation, empowerment, perceived leadership support, subordinate performance, and employee satisfaction have been used to examine the relationship between transformational leadership, and employees' creativity and organisational innovation (see Table 2). However, the majority of the studies in the literature have been investigated the direct relationships but very few studies such as Shin and Zhou (2003) and Gumusluoglu and Ilsev (2009) used the mediating effect. With the support of studies of Shin and Zhou (2003), Gumusluoglu and Ilsev (2009), this study is filling the gap and conceptualised to investigate the relationship between transformational leadership and followers' creativity on the basis of mediating factors such as employee perception of support for innovation, intrinsic motivation, organisational learning, workplace relationship and empowerment. Based on the literature, if employees are empowered; have given support of creativity, and have higher intrinsic motivation; they will be encouraged to perform creative actions (Zhou, 1998; Jung and Sosik, 2002; Sheldon, 1995; Eisenbeib and Boerner, 2013). This research claims that employees' performance and social relationship along with empowerment, support of innovation and intrinsic motivation have a large impact on followers' creativity and innovations. Thus, transformational leadership can support to

develop employee's skills and knowledge through experimentation, communication, and dialogue. Through new skills and knowledge, employees can enhance the capability, creativity, and performance. Apart of this, workplace relationship may support to develop individual attitudes and behaviours in the organisation (Li and Hung, 2009; Tims et al., 2011). This research aims to contribute in the literature where researchers are going to investigate followers' values that may support to be more receptive to their leaders including transformational leadership. Following to this idea, The researcher extends this study and proposes that an employee perception of support for innovation, empowerment, intrinsic motivation, organisational learning, and workplace relationship is a way of underlying the effects of transformational leadership on creativity and innovation. Further details about the relationship of the variables have been explained below.

3.1.1 Transformational leadership and followers' creativity

Leaders have been treated as an important influence factor towards the attitudes and behaviours of followers (Mumford and Gustafson, 1988 and Jung, 2001). Many studies reveal that transformational leaders empower their followers and establish an innovative climate (Jung and Sosik, 2002; Jung et al., 2003). In this domain, transformational leaders have been found creative and innovative towards employees' development. First time Burns (1978) introduced the transformational leadership theory which has been further developed by Bass and Avolio in 1995. Burns (1978, p.4) define the concept as "the transformational leader looks for potential motives in followers, seeks to satisfy higher needs, and engages the full person of the follower. The result of transformational leadership is a relationship of mutual stimulation and elevation that converts followers into leaders and may convert leaders into moral agents." Being a historian, the above author defines the transformational leadership through the historical analysis of leaders. But Bass and Avolio (1995) divided it into four components like charismatic role modelling (leader stimulates esteem, respect, and loyalty), individualised consideration (leaders build one to one relationship with his or her followers), inspirational motivation (leaders articulate an exciting vision of the future) and intellectual stimulation (leaders broaden and elevates the interests of his or her employees).

In the literature, creativity is commonly known as a support of individual to understand the existed problems and their solutions (Amabile, 1996; 1998; Eisenbeib and Boerner, 2013). It has been used as efforts to put existing, conventional ideas together to create new approaches to solving problems (Jung, 2000). The literature supports that transformational leadership transforms followers' creativity at the workplace through the creation of new ideas concerning products, services, processes, and procedures in organisations (Amabile, 1988; Oldham and Cummings, 1996; Zhou, 1998; Eisenbeib and Boerner, 2013). According to Elkins and Keller (2003), the behaviour of transformational leaders is consistent with the determinants of creativity at the workplace. However, different ways were found to affect followers' creativity at the workplace. As a leader, he or she can identify the context of their followers' tasks and articulate a vision demonstrating need and capability of individuals (followers) and organisation.

The creation of the organisational environment may be a better strategy to foster individuals' creativity where followers may have to spend an enormous amount of time and efforts to increase their intellectual capacity, expertise, and creative thinking skills. Several factors that like personality traits, intrinsic motivation, self-efficacy, organisational environment and psychological factors have been pointed out in prior research to support individuals in increasing their level of creativity in an organisation (Amabile, 1993, 96, 98; Deci and Ryan, 1985; Mumford and Gustafson, 1988; Krishnan, 2012; Arnold et al., 2013; Brandt and Laiho, 2013). Present study proposes to investigate the relationship of transformational leadership and followers' creativity in the public sector organisation. According to Gumusluoglu and Ilsev (2009) and Jaussi and Dionne (2003) majority of studies within had initially used data from USA in experimental settings, and using student samples. However, the difference between individual and collective culture of the society may be different as Bass (1995) advocate that transformational leadership is more likely to be seen in 'collectivist cultures than in an individualistic culture'. Therefore, this study suggests investigating in real settings of collective culture like Saudi Arabia to find the effect of transformational leadership towards the followers' creativity. Based on these arguments and previous research findings, it is proposed that:

Hypothesis 1: Transformational leadership is expected to be positively associated with followers' creativity.

3.1.2 Transformational Leadership, Empowerment, and Creativity

Transformational leadership is known as the source of increasing psychological empowerment of followers through building followers self-confidence, individualised consideration and heightens personal development (Gumusluoglu and Ilsev 2009; Conger, 1999). However, empowerment has been identified as an important source of an employee creativity that is associated with psychological aspects of followers' towards leadership. In this context, transformational leadership can increase follower's empowerment by providing meaning and challenge to their work (Avolio et al., 2004; Yang and Choi, 2009; Krishnan, 2012; Si and Wei, 2012). The term empowerment is associated with the employee psychological status that is defined as "*a process of enhancing feelings of self-efficacy among organisational members through the identification of conditions that foster powerlessness and through their removal by both formal organisational practices and informal techniques of providing efficacy information*" (Conger and Kanungo, 1988, p.474). In another definition, empowerment has been explained by describing the power as an energy: to empower is to energise, and it is linked to changes in cognitive variables (called task assessments), which determine the motivation in workers (Thomas and Velthouse, 1990).

As an important behavioural approach, leadership has been identified as being one of the most important factors associated with employee creativity and performance (Li and Hung; 2009; Wang et al., 2010; Lee, 2011; Walumba and Hartnell, 2011). Leadership can affect followers' creativity through catering to followers' intrinsic motivation and work environment. Employee creativity encourages employees to develop different approaches to performing the organisational job. According to Jung and Sosik (2002), empowered employees have higher intrinsic motivation and that encourage creative endeavours. Furthermore, Sheldon (1995) emphasises on personal autonomy as a fundamental trait of creative individuals. Mumford and Gustafson (1988) argue that organisations supporting employees' autonomy will have more innovative achievements. Autonomy or freedom is one of the chief determinants of organisational innovation as it is proved that individuals displayed more creative performance when they left to control the way they complete their tasks (Amabile et al., 1996; Hsiao and Chang, 2011; Gracia-Morales et al., 2012). Zhou (1998) found that when employees work in organisational climate that support task autonomy, they produce higher creative ideas.

In the above literature review, authors mainly explained empowerment as an intrinsic motivation, encourage creative endeavours, personal autonomy and creative performance that may support to organisational climate to be followers' creative. A study conducted by Dvir et al. (2002) *of a field experiment with over 800 Israeli soldiers. Authors found that followers with a transformational leader were more self-confident and took more critical, and independent approaches towards their work than followers take in a control group.* Zhou (1998) found that high task autonomy in work environment supported generating creative ideas of individuals. In another study, researchers such as Gumusluoglu and Ilsev (2009) found that employee psychological empowerment is an influencing source of relationship between transformational leadership and employee creativity. From above discussion, it is expected that create a work environment through transformational leadership where followers feel empowered to seek creative approach in their jobs. Therefore:

Hypothesis 2: Followers' empowerment is expected to be positively mediate the relationship between transformational leadership and followers' creativity.

3.1.3 Transformational Leadership, Intrinsic Motivation, and Creativity

In an organisation's employees can be motivated by intrinsic or extrinsic factors to perform their responsibilities. Intrinsic motivation refers to the inspiration in which employees are attracted in a task for its sake, instead of external outcomes and extrinsic motivation refers to the outside factors of an organisation to inspire employees to perform their responsibilities (Deci and Ryan, 1985). In organisational progress, knowing employee motivational state is important and intrinsic motivation is one of the key ingredients for employee to perform their duties (Amabile et al., 1996). Employees having the intrinsic motivation are more likely to be flexible and persevering (McGraw and Fiala, 1982; McGraw and McCullers, 1979).

In the literature, intrinsic motivation has been found one of the important factors of creativity that attracted to employee work (Amabile, 1983; 1998 and Jaussi and Dionne, 2003). According to the componential theory of creativity, employees being attracted to and interested in the task itself allow them to be creative by searching for new and better ways of doing things (Amabile et al., 1996). The literature supports that intrinsically motivated employees might be more flexible and attractive toward the outcome because he or she

likely to find many alternative approaches, to use non-traditional ways to solve the organisational problems (McGraw and Faila, 1982; Shin and Zhou, 2003). Thus, intrinsically motivated individuals may be more attracted to the task and he, or she is more likely to focus and explore to show more creative behaviour (Gumusluoglu and Ilsev, 2009). Empirically studies suggest that an intrinsically motivated individual is more likely to show a high level of creative performance (Li and Hung; 2009; Lee, 2011; Wang et al., 2011). Therefore, the componential theory of creativity has been the base for research investigating creativity (Amabile et al. 1996; Oldham and Cummings, 1996; Shalley, 1995; Zhou, 1998).

Employees to be creative require more leadership support because followers' creativity through understanding and providing support, and encouragement and will enable them to concentrate on their tasks rather than on extraneous worries and fears (Amabile, 1996; Deci and Ryan, 1985). However, few studies examined mediating role of intrinsic motivation in the relation between creativity and transformational leadership (Shin and Zhou, 2003). Authors found that the intrinsic motivation plays a partial mediating role in influencing followers' creativity by transformational leadership. They further argued that intrinsic motivation mediates this relationship in full in the case of employees valuing security, conformity, and tradition. In their study, Gumusluoglu and Ilsev (2009) tested a model at micro and small sized Turkish software development companies, result showed a significant association of intrinsic motivation with the transformational leadership and followers' creativity. However, in the mediating role of intrinsic motivation between transformational leadership and followers creativity was not found significantly. Above studies have partial support in mediating role of intrinsic motivation and the rationale for the argument is that these studies have been conducted in developed, individualised, and small private organisation. With the conceptualisation support of the study of Gumusluoglu and Ilsev, (2009) and our theoretical rationale to support the factors relationships, researcher proposes the following hypothesis:

Hypothesis 3: Intrinsic motivation is expected positively to mediate the relationship between transformational leadership and followers' creativity.

3.1.4 Transformational Leadership, Support for Innovation, and Creativity

Transformational leadership supports creative ideas within the organisation where behaviours are suggested *to act as creative enhancing forces, intellectual stimulation and inspirational motivation into the idea generation process* (Sosik et al., 1998). Transformational leadership is positively related with creativity because of individualised consideration that is to be promoted by transformational leader. However, its impact through inspirational motivation and intellectual stimulation might be on innovation. Innovation has been conceptualised with adoption of useful ideas and idea implementation with the product that should take out from outside of an organisation (Kanter, 1988, Van de Van, 1986; Scott and Bruce, 1994). Eventually, innovation commences with problem recognition and to solve that problem by generating different ideas, which may be adopted, or either novel. Exploring innovative ideas for the organisational production is a multistage process where many social, cultural, and organisational factors might be involved. These factors may largely support the followers' creativity where climate and culture have been found important in the literature (Mumford and Gustafson, 1988; Scott and Bruce, 1994; Yukl, 2001; Biswas, 2009). However, literature support to organisation's qualities to provide appropriate climate and culture to their employees influencing employees' creativity (Siegel and Kaemmerer, 1978; Amabile et al., 1996 Biswas, 2009; Abbasi and Zamani-Miadeshti, 2013). Many authors such as Mumford and Gustafson (1988) argue that the organisational innovation is dependent on the availability of organisational climate where individuals developed their capacity for innovation, their readiness to carry out productive efforts. Furthermore, Scott and Bruce (1994) agreed that organisational climate is one of the most significant factors that influence innovation. They further argue that perceptions of employees on the extent of creativity support and the extent of creativity resource-allocation in the organisation have a significant effect on innovative performance. Indeed, organisational climate and culture presents a rational tool and a guiding standard of creative processes leading to more innovative products and services..

The literature confirmed that leaders have a positive role in the development of organisational culture, environment and transformation which are related to collective social construction where leaders have full control and influence (Mumford et al., 2002 Biswas, 2009; Abbasi and Zamani-Miadeshti, 2013). Indeed, leaders develop a work environment that may encourage creativity and also create a climate that serves as a leading

way for more creative work process (Amabile et al., 2004; Scott and Bruce, 1994). Thus, based on leaders' beliefs for, what is more, leaders can create a supporting climate in their organisations. Here leaders can change creative behaviour through their influence on the employee's awareness of a climate supportive of innovation (Gumusluoglu and Ilsev, 2009).

According to Gumusluoglu and Ilsev (2009), *transformational leaders, by intellectually stimulating their followers, championing innovation, and articulating a compelling vision throughout their organisation, help establish an organisational climate where employees feel challenged and energised to seek innovative approaches in their jobs.* Several studies such as (Gumusluoglu and Ilsev, 2009) examined this effect and found evidence that organisation climate supporting innovation is a significant determinant of individuals' creativity. However, there are also strong negative relationships between transformational leadership and followers' innovative behaviour (Basu, 1991; Basu and Green, 1997). Howell and Higgins, 1990 and Jung et al. (2003) found a positive impact of transformational leadership on innovative organisational climate. In addition, Koene et al. (2002) found a positive effect of charismatic leadership and consideration on organisational climate. Bain et al. (2001) conducted an empirical study in four Australian companies with large R&D projects. They examined six indicators of innovation such as supervisory ratings and found a significant relationship between them and organisational climate for innovation (Bain et al., 2001). Another study conducted by Scott and Bruce (1994) examined scientists and engineers in the R&D division in a large US company and found that organisational climate that support innovation lead to increasing innovative behaviour. They found that leader-follower exchanges were positively associated with innovation support. Based on these observations, this study proposes the following hypothesis.

Hypothesis 4: Followers' perception of support for innovation is expected positively to mediate the relationship between transformational leadership and followers' creativity.

3.1.5 Transformational Leadership, Workplace Relationships, and Creativity

Employees in any organisation are like partners in social and task interaction. Positive association between co-workers and their leaders is shown as constructive attitudes and behaviours towards the organisational goals and negative relationship between co-workers

and their leaders support to stress (Viswesvaran, Sanches, and Fischer, 1999). The relationships that employee form at their workplace with their supervisors and co-workers represent social exchange relationships that are especially salient with respect to task and citizenship behaviour (Li and Hung, 2009). In social identity theory, individuals like to categorise themselves into two important categories such that leader-member relationships and co-workers relationships (Tajfel and Turner, 1985; Sias, 2005). Interpersonal relationship between leaders and workers constitute an interconnected social system in an organisation.

According to Li and Hung (2009), members in a transformational leadership context interact more frequently with their leaders and have their leaders' support, confidence, encouragement, and consideration, and hence are more satisfied with their leader, identify with the leader, trust in the leader and by extension, are more willing to form and maintain a high quality relationship with their leaders.. However, social aspects regarding the relationships at workplace have been ignored, and first time Li and Hung (2009) explored this kind of relationship. Thus, maintaining such behaviour by direct influence of leaders towards individuals on the development and maintenance their characteristics, values, and beliefs. Based on this conceptualisation, the following hypothesis is proposed:

Hypothesis 5: Workplace relationship is expected positively to mediate the relationship between transformational leadership and followers' creativity.

3.1.6 Transformational Leadership, Organisational Learning, and Creativity

In an organisation, transformational leadership behaviour symbolises the practical form to engage the employee and to motivate them to perform their duties according to given agreement (Rubin et al., 2005). Transformational leadership activates the employee with their skills, knowledge, and support to develop the attitudes and behaviours towards the organisation. Organisational learning is a way of developing new skills and knowledge to enhance follower's creativity. Thus for creativity, learning is essential which can be acquired direct by experience of skills or observational from professional like leaders. Many studies have been supported to this notion like Gong et al., (2009) examined the relationship between employee learning orientation, transformational leadership and employee creativity through mediating role of employee creative self-efficacy. By applying Hierarchical Linear Modelling to test hypotheses from 277 insurance agents in Taiwan,

authors found that employee learning and transformational leadership were positively related to employee creativity. In another study, Garcia-Morales et al. (2008) seek the effects of transformational leadership on organisational performance through knowledge and innovation. Authors analysed theoretical and empirical the leader's perceptions of different intermediate strategic variables related to knowledge (knowledge slack, absorptive capacity, tacitness, organisational learning) and innovation influence the relation between transformational leadership and organisational performance. Based on the data from 408 Spanish organisations, results confirm that *transformational leadership supports to develop a foundation of organisational knowledge in the organisation. Results also confirm that knowledge slack encourages absorptive capacity and transformational leadership helps to improve absorptive capacity. Furthermore, results verify that the absorptive capacity also facilitates the acquisition, transfer, and use of tacit knowledge.* Finally, transformational leadership affects slack knowledge, absorptive capacity, tacit knowledge, organisational learning, and innovation that allow the creation of positive synergies that improve organisational performance. Thus, capability of transformational has been proved to provide skills and knowledge to enhance employees' creativity and hence the researcher proposes that:

Hypothesis 6: Organisational learning is expected positively to mediate the relationship between transformational leadership and followers' creativity.

3.1.7 Transformational Leadership and Organisational Innovation

In the literature, the organisational innovation has been treated as an important and crucial factor to support successful development of ideas, which helps creative approach to solving the organisational problems. Innovation has been defined as *the successful implementation of creative ideas within an organisation* (Amabile et al., 1996). Thus, innovation is at an organisational level, which has consequences on individuals' creativity by teams and individuals (Oldham and Cummings, 1996; Gracia-Morales et al., 2012).

Transformational leadership has more impact on organisational innovation because they enhance the tendency of organisation to innovate through the new vision and creative ideas (Gumusluoglu and Ilsev, 2009; Hsiao and Chang, 2011; Si and Wei, 2012; Noruzy et al.,

2013). This is resulting behavioural reflect towards followers and motivation which may have a positive impact on organisational innovation. Literature supports that transformational leadership has an impact on innovation (Kanter, 1983; McDonough, 2000). Several features like interactive vision, pay maximum attention, effective communication, value sharing, encouraging appropriate environment has been a positive influence on innovation (Adair, 1990; Tushman and Nadler, 1986). In addition to these factors, other factors such as the organisational learning, trust, positive attitudes and creativity may contribute towards the better understanding of the strong relationships between transformational leadership and organisational innovation (Manz et al., 1989; Scott and Bruce, 1994; Lefebvre and Lefebvre, 1992; Tierney et al., 1999; Kanter, 1983; Hsiao and Chang, 2011; Denti, 2012; Gracia-Morales et al., 2012; Si and Wei, 2012; Noruzi et al., 2013). Thus, transformational leaders have been found with their intellectual stimulation abilities, motivate their followers to think freely and adopt exploratory and generative thinking approaches (Sosik et al., 1997). According to Mumford et al. (2002), when transformational leaders apply a vision-based motivational process, this will improve organisational innovation. The reason behind this is that when transformational leaders adopt a view, demonstrating work aims and promoting this concept through project selection and evaluation and not through overt affective appeals, they will have a promulgated work-focused vision and that will improve followers' creative efforts (Mumford et al., 2002).

Based on various studies the relation among transformational leadership, employee creativity and organisational innovation has been proved that transformational leadership promotes higher level of creativity and that enhance organisational innovation. This argument has been supported by many studies by explanations that transformational leaders engage their followers in personal value systems to reward them for required performance so they do not stick to exchanging contractual agreements (Bass, 1985; Gardner and Avolio, 1998). In addition, transformational leaders raise the enthusiasm of their followers to exceed self-interests for the sake of the organisation, raise the followers' awareness to the values and significance related to required outcomes, and heightened followers' expectations about their performance, through articulating important vision and mission for the organisation as whole. Geyer and Steyrer (1998) revealed positive relationship between transformational leadership and innovation and results found a significant relationship

between the extent to which transformational leadership is applied by top managers and long-term performance. Sosik et al. (1998) found that *transformational leadership increases followers' creativity in a computer-mediated brainstorming exercise*. In their study, they measured the followers' performance using the number of generated creative ideas. Howell and Avolio (1993) also found *a positive impact of intellectual stimulation granted by transformational leaders and followers' performance, but only in a climate that support innovation*. Furthermore, Keller (1992) also found a positive influence between transformational leadership and the teams' performance of research and development (R&D) division in a large organisation. He measured the performance using the leaders' ratings of their followers' innovative abilities and to what extent those abilities contributed to completed projects. In a recent study Gumusluoglu and Ilsev (2009) tested a model on 163 R&D personnel managers found a positive association of transformational leadership and organisational innovation. In summary, there is substantial theoretical and empirical support for the relationship between transformational leadership and organisational innovation and this study also proposes a positive relationship for these factors that are conceptualised in a governmental organisation with different culture.

Hypothesis 7: Transformational leadership is expected to be positively associated with organisational innovation.

3.1.8 Followers Creativity and Organisational Innovation

Followers' creativity is the creation of new and useful ideas concerning products, services, processes, and procedures in organisations (Oldham and Cummings, 1996; Zhou, 1998) which leads to enhance the employees' capabilities to perform tasks. In the literature, creativity is to be revealed to equip the employee for setting goals and solutions of problems created in the organisation (Redmond et al. 1993). To develop organisational culture and climate for the diffusion of learning is a way of employee innovation in the organisation. It could be possible, when rewards based efforts are made to produce creative work approaches, the willingness of employees to produce more creative outcomes will be increased (Jung, 2001; Mumford and Gustafson, 1988). Thus, employees' creativity may encourage determining innovation at the workplace.

The literature reveals that the *innovation is the successful implementation of creative ideas within an organisation* (Amabile et al., 1996). Thus, innovation is the total creative process

that is based on individuals' creativity. According to Amabile et al. (1996), the starting point for innovation is the individual creativity that leads to successful implementation of new programs, new product introductions, or new services depends on a person or a team having a good idea and developing that idea beyond its initial state. In an organisation, creative work occurs when the tasks presented involve complex, ill-defined problems where performance requires the generation of novel, useful solutions (Mumford et al., 2002). Based on the argument that creative performance is commonly appraised with respect to the products where a successful solution has been implemented to a novel, ill-defined problem. The researcher focuses on the notion that creativity positively influences on organisational innovation.

Hypothesis 8: Followers' creativity is expected to be positively associated with organisational innovation.

3.2 Summary

The conceptualisation of this research is based on the research gap where literature advocates that employee's intrinsic motivation, perception of the work environment and empowerment is the mechanisms underlying the effects of transformational leadership on employee creativity. In this study, the researcher developed a theoretical model and that basis hypotheses have been developed with the support of literature (see Figure 3.1). The factors lead to high product features and better services to the organisation. Thus, for survival, chase to new trends and organisational growth and reduce pressures on organisation need to be more innovative than before. Indeed, organisational innovation through employee creativity plays a significant position for a strong economy and the success and competitive advantage of organisations. Given that, leaders often have a major degree of control to influence to followers' behaviour with respect to their creativity and organisational innovation in a way inducing to participate for the achievement of organisational goals.

CHAPTER FOUR: RESEARCH METHODOLOGY

4.1. Introduction

The research methodology chapter explains the methods and research design applied to confirm empirically the theoretical model proposed in chapter of the theoretical framework. Indeed this chapter illustrates the methodological foundation and research design, which is proposed to answer the research questions and to examine the suggested hypotheses for the study. Saunders et al. (2003) consider methodology as the theory of how research should be carried out. These researchers further argue that the term ‘method’ refers to the tools and techniques used to collect data through questionnaires, observation, and interviews then to analyse data using both statistical and non-statistical analysis techniques. Choice of suitable methodology and methods requires an obvious and inclusive rationalisation because of the validity of research is to be judged. So far, the advancement of this study is centred on the review of existing literature review and theoretical approach, which were earlier discussed. Therefore, this chapter first discusses different types of research philosophy in order to understand the endorsement of the method that has been implemented by the researcher. It present an overview of the main research methods such as deductive and inductive approaches in order to justify the choice of the deductive approach. The research approach adopted is an important step as it allows researchers to take a more informed decision about the research design, hence, defining the subsequent methods used. In addition, the researcher argues in detail the data collection steps like sample selection, developing questionnaire, scales measurement, and pilot (initial) study. After collection of data, reliability and validity of data will be analysed, and hypotheses will be testing through regression tests. Before the conclusion section, , ethical issues will be reviewed to make sure the data is unbiased and generalised.

4.2. Research Philosophy and Approaches

Research philosophy denotes the primary kind of knowledge, veracity and existence in the study. It is important to be familiar with issues influence the research in data collection and

data analysis. Saunders et al. (2003) argue that the adopted philosophy of the research depends on the way that “*a researcher thinks about the development of knowledge*”. Thus, philosophical stance facilitates the scholar to recognise fact in the means that it is observed and its connection with knowledge that give details on how the fact has been observed. In the literature, Guba and Lincoln (1994, p.107) categorise research philosophies into three fundamental beliefs, they are epistemology, ontology and methodology.

Epistemology belief speaks about the relationship between the research queries and the researcher while ontology relates to queries about the nature of the reality that is to be investigated and finally, methodology makes clear to queries and techniques of the research problems is to being investigated. According to Uhl-Bien (2006), epistemology views persons and organisations as ongoing multiple constructions made “in” processes and not the makers “of” processes, while the ontology views relational processes as centred on an individuals’ perceptions and cognitions as they engage in exchanges and influence relationships with one another. Based on that, a paradigm serves as a guide for the investigator not only in relation to the method, but also in ontologically and epistemologically fundamental ways (Guba and Lincoln, 1994).

Authors such as Healy and Perry (2000, 118) explain scientific research paradigms as “the overall theoretical frameworks within which some researchers work, where a paradigm is a world-view or “a set of linked assumptions about the world that is shared by a community of scientists investigating the world.” Furthermore, Filstead (1979) states that a paradigm not only provides a specific line of enquiry to understand different kinds of phenomena, but it also establishes a framework in which those phenomena can be identified as existed before. In the literature, Guba and Lincoln (1994) identify three philosophical paradigms into following four categories of scientific paradigms: positivism, critical theory, constructivism, and realism. Moreover, within each of those paradigms the following three elements: ontology, epistemology, and methodology (Lincoln and Guba, 2000). All paradigms do different things in and have different effects on different areas of research, on the other hand, in order to choose the suitable approach to do this research; it is essential to concisely describe all of them.

Positivist: the positivist school of thought is scientific that advocate value free like objective as previously mentioned and it is quantitative. Bryman and Bell (2007) argue that

methods of scientific knowledge can apply to study of social reality and beyond. Positivism dominates the literature in science and presupposes that science quantitatively measures independent facts about a single apprehensible reality (Healy and Perry, 2000). It is argued that the positivistic model is interested with “*facts or causes of social phenomena.*” This means that data and its analysis are value-free, and data do not change because they are being observed (Hussey and Hussey, 1997). Furthermore, quantitative research aims to explain and predict phenomena in the social world through searching for regularities and casual relationships between their ingredients (Burrell & Morgan, 1979). Contrasting the positivism's relevance to much quantitative research, the relevance of the following three paradigms are too much qualitative research (Healy & Perry, 2000).

Post Positivism: This concept was developed in the context of human behaviour and their action research. This school of thought is following the philosophy of objectivism with the opposition of inquiry method. This thought always falsifies the hypotheses or theoretical assumptions taken for the research and confirm the cause law effect.

Critical theory: critical theory emphasises social realities and subjectivities incorporating historically situated structures (Healy & Perry, 2000). This philosophy is focussed on the theory of “*realism/subjectivism*” where social phenomenon is reliant on a social actor’s conceptualisation to identify reality (Bryman and Bell, 2007). A researcher adopted a critical theory paradigm aims at critiquing and transforming “*social, political, cultural, economic, ethnic, and gender values*” (Healy & Perry, 2000). In this paradigm, research inquiries are often long-term ethnographic and historical studies of organisational processes and structures whereas assumptions are inherently subjective and hence knowledge is grounded in social and historical routines and is, therefore, value-dependent and not value-free (Healy & Perry, 2000).

Constructivism: constructivism assumes that the truth is a particular belief system held in a particular context (Healy & Perry, 2000). This school of thought supported that the social phenomenon are frequently being obtained through social actors (Brayman and Bell, 2007). Same as critical theory paradigm, constructivism seeks to find about the ideologies and values that lie behind a finding so that reality consists of “multiple realities” that people have in their minds (Healy & Perry, 2000).

In the social science research methodology, two philosophies such as positivism and post-positivism thoughts are called “*scientific deductive*” approach to doing an empirical study through quantitative methods . Constructivism/interpretivism thoughts are opposite to the above thought and reflect social critical theory and social constructivism. These two ideas of the researcher follow the inductive techniques of inquiry in which individuals know the particular implication of their experiences in relation to their objectives. This is known as a “*phenomenological approach where qualitative approach apply to elaborate into theories with a specific context*” (Crotty, 1998)

For this research, choosing the research philosophy is the decision to select one of the following two main alternatives: a positivist or a phenomenological philosophy. Many authors like Hussey and Hussey (1997); Saunders et al. (2003) identify main two views about the research process dominate the literature: positivism and interpretivism. Positivist approach is a scientific way to conduct the enquiry through quantitative manner for understanding human behaviours. it is argued that the positivistic approach is interrelated with the foundations of social phenomena where “*language of theories, variables, and hypotheses*” apply. This method looks for predicting and explaining what happens in the social world by searching for regularities and casual relationships between its constituent elements (Burrell and Morgan, 1979, p.5). However, Interpretivism approach is known as phenomenological or non-positivist and is qualitative. Interpretative research; searches for people’s accounts of how they understand the world and its structures and processes (Fisher, 2004). An interpretative researcher tries to map the range and complexity of views and positions that people take on a particular research. Fisher (2004) argues that a researcher who adopts an interpretative philosophy views the link between understanding and action as an indirect one where improving understanding and knowledge does not reveal the best actions to take. Furthermore, the link between action and understanding is considered indirect because the world is complex, and the options for action are not all the time available apparent. Moreover, the link between understanding and action is mediated through people’s thinking, values, and relationships with each other. An interpretivist philosophy is used when details about the situation need to be discovered in order to understand the reality or perhaps a reality working behind them (Saunders et al., 2003).

4.3. Selection of Quantitative Research Approach and Justification

The research philosophy reflects the way researchers take into account the approach taken in the development of knowledge. In order to choose a particular direction, this method is based on the type of the research framework where the challenge has been addressed with the support of literature. From the usage of two wide research approaches such as positivism and phenomenological, the positivist approach adopted for this research. Many well-known authors like Hussey and Hussey (1997, p.55) described the common procedure under a “*positivist paradigm is to study the literature to establish an appropriate theory and construct hypotheses.*” it is important to note the presence of positivism “*if they were based on prior fixed relationships, quantifiable measures of variables, hypotheses testing and drew inferences about phenomenon from the sample to a stated population*”.

Choosing the right research method depends on the research itself, its nature, research question(s), and the adopted research philosophy. Saunders et al. (2003) argue that there are three reasons that make for choosing a research approach important, which are the following:

- i. It enables the researcher to take a more informed decision about the research design
- ii. It helps the researcher to think about those research approaches that will work for the study and crucially, those that will not
- iii. Knowledge of the different research traditions enables a researcher to adapt the research design to cater for constraints.

The main purpose of this study is to explore the impacts of transformational leadership through “*employee perception of support for innovation, empowerment, intrinsic motivation, organisational learning*” and workplace relationship on follower’s creativity and organisational innovation. This research study has been conceptualised on the basis of the literature review and hypotheses developed with the support of the relationship of variables. Following to positivist research philosophy/phenomenon, this research started from the literature review and found research gap. Following to research gap, a theoretical model has been developed with the support of variables and finally hypotheses developed.

Thus, the researcher adapted a deductive approach because; this is following five sequential stages through which deductive approach will progress as identified by Saunders et al. (2003):

- i. Deducing a hypothesis (a testable proposition about the relationship between two or more events or concepts) from the theory.
- ii. Expressing the hypothesis in operational terms (that is, ones indicating exactly how the variables are to be measured), which propose a relationship between two specific variables.
- iii. Testing this operational hypothesis (this will involve any form of empirical inquiry),
- iv. Examining the specific outcome of the inquiry (it will either tend to confirm the theory or indicate the need for its modification),
- v. If necessary, modifying the theory in the light of the findings.

Another reason for the researcher to adopt the deductive approach is that, according to Saunders et al. (2003), the deductive approach enjoys three main characteristics: First, the search to explain causal relationships between variables. Second, concepts need to be 'operationalised' in a fashion that permits facts to be measured quantitatively. Third, the deductive approach requires samples of sufficient numerical size to allow generalisation to be made. Those three characteristics offers increase the validity and accuracy of the findings of the research.

4.4. Rationale for choosing a methodology with references

Today's leadership is emerging as a new field in the history of organisational behaviour. It is considered as the act of influencing and behavioural activities to induce followers to behave in a desired manner and influence towards the attainment of a specified goals. Since last few decades authors like Burns (1978) argues that leadership is considered one of the most examined but least understood phenomenon. He describes leadership as a flow of progressing connections in which leaders are constantly suggesting motivational reactions

from followers and adapting their behaviours as they encounter receptiveness or resistance, in a constant process of flow and counter flow. From the leadership literature, transformational leadership has been placed an important conceptualisation as a process that through it “leaders and followers raise one another to higher levels of morality and motivation.” According to Bass and Riggio (2006, p.3), transformational leaders are those who “stimulate and inspire followers to both achieve extraordinary outcomes and, in the process, develop their leadership capacity.”

Transformational leadership reflects a kind of leadership in which leaders move their followers beyond immediate self-interests through idealised influence (charisma), inspiration, intellectual stimulation, or individualised consideration. Bass (1985) and also Bass and Avolio (1994, 1995) in their theory state that there are four behavioural dimensions of transformational leadership: charismatic role modelling or idealised influence, inspirational motivation, individualised consideration, and intellectual stimulation. Based on transformational leadership literature these four behavioural dimensions are more capable of reforming followers’ values and norms, encourage both individual and organisational changes, and support their followers to perform beyond performance expectations (Jung & Avolio, 2000).

In the leadership domain, creativity and innovation have significant value to understand the follower’s motivation and organisational innovation. According to Amabile et al. (1996, p.1155), “all innovation begins with creative ideas.” Successful implementation of new programs, new product introductions, or new services depends on a person or a team having a good idea—and developing that idea beyond its initial state. Reviewing the literature on between transformational leadership, follower’s creativity, and innovation, different factors have been found to be positive and significant. Sosik et al., (1998) examined effects of high and low levels of transformational leadership on group creativity (four factors i.e. fluency, flexibility, originality and elaboration) under anonymous and identified electronic brainstorming conditions. Results from one hundred and fifty-nine undergraduate students at a public university in the Northeast show that groups working under higher levels of transformational leadership generated more idea elaborations and original solutions than groups working under lower levels of transformational leadership. Further anonymous groups were more flexible in generating ideas than identified groups. Lee et al. (2011)

conducted an empirical study of transformational leadership, team performance, and service quality in retail banking. Using data collected from 192 employees of retail banks in Macau, China, authors investigated five dimensions of transformational leadership i.e. idealised influence (attributed), idealised influence (behaviour), intellectual stimulation, inspirational motivation and individualised consideration have an impact on team performance with respect to team cohesion, team leader, job satisfaction and team competence. Result implies that leadership and service quality were not directly associated but mediated by team performance.

By applying a survey questionnaire, Jung et al., (2003) collected data from 32 Taiwanese companies in the electronic/telecommunications industry. Study results confirmed a direct and positive relationship between transformational leadership and innovation. Results reveal significant and positive relations with empowerment and innovation-supporting organisational climate. However, organisational innovation has a significant but negative relation with empowerment and has a significant and positive relation with innovation-support organisation climate. Schriesheim et al. (2006) tested the path-goal and transformational leadership theory predictions at the individual level of analysis. By applying confirmatory factor analysis, hierarchical linear multiple regression and within and between entity analysis on a sample of 169 social services workers in 40 groups in New York, results confirmed no evidence supporting either the path-goal or additive augmentation hypotheses.

However, a positive moderator effect was observed for some transformational leader behaviours and the leader contingent reward behaviour variable, supporting a form of augmentation effect that is not incongruent with Bass's approach to transformational leadership. Garcia-Morales et al. (2008) seeks the effects of transformational leadership on organisational performance through knowledge and innovation. The author seek to fill the gap by analysing theoretical and empirical the leader's perceptions of different intermediate strategic variables related to knowledge (knowledge slack, absorptive capacity, tacitness, organisational learning) and innovation influence the relation between transformational leadership and organisational performance. Based on the survey data from 408 Spanish organisations, results confirm that transformational leadership supports to develop a foundation of organisational knowledge in the organisation. Results also confirm that

knowledge slack encourages absorptive capacity and transformational leadership helps to improve absorptive capacity. Furthermore, results verify that the absorptive capacity also facilitates the acquisition, transfer, and use of tacit knowledge.

Finally, transformational leadership affects slack knowledge, absorptive capacity, tacit knowledge, organisational learning, and innovation that allow the creation of positive synergies that improve organisational performance. In a recent study, Gong et al., (2009) examined the relationship between employee learning orientation, transformational leadership, and employee creativity through mediating role of employee creative self-efficacy. Data for the main study were collected through questionnaire from 277 insurance agents in Taiwan. By applying Hierarchical Linear Modelling to test hypotheses, the author found that employee creativity was positively related to employee sales and to supervisor rated employee job performance. However through the mediation of employee creative self-efficacy employee learning orientation and transformational leadership were positively related to employee creativity. Gumusluoglu and Ilsev (2009) investigate the impact of transformational leadership on organisational innovation to determine whether internal and external support for innovation as contextual conditions influence this effect. Researcher's test hypotheses through the quantitative data obtained from 163 R&D personnel and managers at 43 micro and macro-sized Turkish software development companies. Results provided support for the positive influence of transformational leadership on organisational innovation. Results proved that the external support for innovation was found to moderate this effect significantly. Specifically the relationship between transformational leadership and organisational innovation was stronger when external support was at high level than when there was no external support. Furthermore, study show that transformational leadership is an important determinant of organisational innovation and encourages managers to engage in transformational leadership behaviours to promote organisational innovation.

The literature above advocates that leaders can directly affect followers' creativity and organisational innovation. By applying quantitative approach, many empirical studies showed that the perception of support for innovation and psychological empowerment is the main source of employee creativity (Tierney et al., 1999; Gumusluoglu and Ilsev 2009). From a methodological perspective, this study has selected quantitative paradigm with a

survey instrument for data collection. However, it is supported by the literature and many researchers in the domain of leadership and especially in the transformational leadership have used a positivist approach (refer literature review chapter). Based on the literature, this study applied quantitative methodology for obtaining the data to investigate the role of the transformational leader that may empowers their followers, organisational performance and develops an innovative climate. To this extent, the researcher designed a positivist approach for investigation research objectives.

In business research, positivist approach is well known as a scientific approach to conducting the enquiry for understanding human behaviours. In this method most probably quantitative data are required for which survey questionnaire is to be used. According to Burrell and Morgan (1975, p.5) that deductive approach looks for predicting and explaining what happens in the social world by searching for regularities and casual relationships between its constituent elements. This approach starts from the literature review from which research gap was found. Based on the literature gap, a conceptual framework was developed, and research hypotheses produced. Finally, for the testing hypotheses survey questionnaire were adapted through the different Likert scale.

4.5. Research Design

Research design is related with the plan to follow step by step for investigating research problem/questions. According to Sarantakos (1993), research design is like a model that is connected with the sequence of steps, which are closely related where the next step is dependent of completion of the first step. Research model supports to conduct research in a systematic way (Cook and Reichardt, 1989). In the field of research, success depends upon the selection of the right process and research design is a process of formulating research problems, context of the study, procedures for collection and analysis of the data, ethical requirements, and the researchers' role while conducting the study (Hussey and Hussey, 1997).

Research design supports investigators to develop boundaries for research in the form of defining study setting, examination, study context and other relevant issues. This study is a co-relational research to examine transformational leadership effects through employee

perception of support for innovation, empowerment, intrinsic motivation, organisational learning, and workplace relationship on follower's creativity and organisational innovation in public security sector organisations in the Kingdom of Saudi Arabia. For this study, a research design has been developed based on hypothetico-deductive methods which start from a literature review, drawing research gap and developing theoretical framework on the basis of literature gap, developing hypotheses and developing logical deductions for the results of the study (Sekaran, 2006). The researcher has conceptualised this study based on literature review and hypotheses developed with the support of the relationship of variables. Following the Neuman (1995) and Sekaran (2006), research design for this study is based on hypothetico-deductive methods that start from the literature review, develops a theoretical framework, formulates hypotheses and explaining the site chosen for data collection and procedures for collection and data analysis. Having a systematic research design enabled researchers to follow the investigation properly and accurately. Following figure 5.1 lists the step by step process that will be applied for this study.

This study was designed based on hypothetico-deductive method to investigate the research questions. The process of this study began with the extensive reviewing of the literature in the domain of leadership. Through the literature, the research gap has been found, and theoretical framework developed to represent the intended empirical research. In the theoretical framework, several factors such that transformational leadership, employee perception of support for innovation, empowerment, intrinsic motivation, organisational learning and workplace relationship on follower's creativity and organisational innovation have been connected and developed model along with research hypotheses. To examine the model appropriate data is required to confirm/reject the research hypotheses. In this regard, the study was designed as a positivist approach for data collection with the support of literature. In positivist philosophical approach research, starts from the literature review and develop a model along with hypotheses. Testing the hypotheses data can be collected through a survey questionnaire where likert scale is used to provide choices for the participants. According to Oppenheim, (1992, p.200) the reliability of likert scales tends to be good, partly because of the greater range of answers permitted to participants.

Developing research design needed six steps proposed by Sekaran (2000). According to him, researchers should follow six steps of guideline to follow the research design.

- i. Decide the purpose of the study.
- ii. Setting of the study.
- iii. Type of the study.
- iv. Researcher extent within study
- v. The time horizon
- vi. Analysis unit/Research context

Following to guidelines of Sekaran (2000), this study proposes exploratory, descriptive and hypotheses testing. Reasons behind proposing exploratory are that this study propose to examine transformational leadership effects through employee perception of support for innovation, empowerment, intrinsic motivation, organisational learning and workplace relationship on follower's creativity and organisational innovation in public sector organisation. For this purpose, exploratory method is preferred when new extents are required for investigation. The researcher has developed hypotheses to investigate the relationship of variables. The setting of this study is non-contrived because this study is based on correlational basis not causal relationship. It is supported by authors like Sekaran (2000) that argue that correlational studies be conducted in non-contrived settings. After that, selection of the area and participants must be cleared. This study is going to be conducted in the public security sector in the kingdom of Saudi Arabia. In research, selection of the unit is an important factor to formulate the data collection policies. This research is based on predicting the variables thus it invites individual to be a unit of analysis. Finally, time required for the study is selected as a cross-sectional that needs to be conducted just once to collect data. Following to Sekaran (2000) all six steps are summarised in Table 4.1 below.

Table 4.1: Steps for research design

Research steps proposed by Sekaran (2000)	Choice of the researcher
Purpose of the study	Hypotheses testing
Investigation type	Correlational
Research Extent	Researcher's minimal interference
Setting of the study	Non contrived
Analysis Unit	Individuals
Time horizon	Cross-sectional

Source: Developed by researcher

4.6. Developing Survey Questionnaire

The researcher is going to conduct this study in public security sector organisations through survey questionnaire. The survey questionnaire was developed based on literature support where many well-known authors have been used survey research in this domain (Sosik et al., 1998; Jung et al., 2003; Schriesheim et al. 2006; Garcia-Morales et al. 2008; Gong et al., 2009; Lee et al., 2011). In a survey questionnaire, a choice of options would be given in the form of Likert scale. According to Oppenheim (1992, p.200) the likert scale was adopted in the survey partly because the reliability of likert scale tends to be good and partly because of the greater range of answers permitted to the respondents. However, through a survey questionnaire a number of the respondents can be covered which is an economical and easy to collect data for the study.

4.6.1. Survey Questionnaire

Data collection through survey questionnaire is an economic tool, which can be developed based on information needed. In a deductive approach survey questionnaire is one of the important tools to collect data, which provide insight into individual perceptions and attitudes. Positivist approach is a scientific way to conduct the enquiry through quantitative manner for understanding human behaviours. According to Burrell and Morgan (1975, p.5) that deductive approach looks for predicting and explaining what happens in the social world by searching for regularities and casual relationships between its constituent elements. This study was conceptualised based on literature gap where researcher proposed hypotheses that transformational leadership effects through employee perception of support

for innovation, empowerment, intrinsic motivation, organisational learning and workplace relationship on follower's creativity and organisational innovation. Testing the hypotheses needed data and in the positivist approach, the survey questionnaire has been justified for that. The survey questionnaire is used for this study have been distributed in nine sections.

Section 1: Demographic Background

Section 2: Transformational Leadership

Section 3: Intrinsic Motivation

Section 4: Psychological Empowerment

Section 5: Perception of Support for Innovation

Section 6: Employee Learning

Section 7: Workplace Relationships

Section 8: Employee Creativity

Section 9: organisational innovation

4.6.2. Measurement Scales

1. Transformational Leadership

Researcher used the Multifactor Leadership Questionnaire (MLQ) form 5X-Short (Bass and Avolio, 1995). This questionnaire has four dimensions such as idealised influence, inspirational motivation, intellectual stimulation, and individual consideration. Each dimension has four questions with five points likert scale ranging from 1, "not at all," to 5, "frequently, if not always," employee indicated how frequently each statement fitted their immediate supervisors. Alpha reliability of transformational leaders was .93.

2. Intrinsic Motivation

Employee intrinsic motivation was adapted from the work of Amabile (1985) and used by Teirney et al. (1999). In this variable five items were used with five points likert scale. Cronbach's alpha was .74.

3. Psychological Empowerment

In this variable four dimensions of empowerment were used. Three items of meaning were taken from Tymon (1988) and used by Spreitzer (1995). For competence, three items were adapted for confidence from Jones's (1986). Third dimension is self-determination for those three items were adapted from Hackman and Oldham's (1985) and used by Spreitzer (1995). Finally, Impact were measured by taking three items from Ashforth's (1989) and used by Spreitzer (1995). For all four-dimension research used five points likert scale from very strongly disagree to strongly agree.

4. Perception of Support for Innovation

By adapting 22 items scale containing two subscales (support for creativity and tolerance of differences) developed originally by Seigel and Kaemmerer (1978) and later modified by Scott and Bruce (1994). All items were rated on a five-point likert scale ranging from 1 (very strongly disagree) to 5 (very strongly agree).

5. Employee Learning

The researcher adapted Elliot and Church's (1997) six-item learning orientation scales to the work setting studied here. All items were rated on a five-point likert scale ranging from 1 (very strongly disagree) to 5 (very strongly agree). Cronbach's alpha was .87.

6. Workplace Social Relationships

A four-item scale was used to measure social relationships in the workplace. The scale was adapted from the five-item relationships subscales of Hanpachern's Revised Margin in Life scale (1998), which itself had been modified from the original published survey by Stevenson in 1982. On a five point likert scale ranging from 1, "Strongly Disagree," to 5, "Strongly Agree."

7. Creativity

The researcher adapted 13 items scale from Zhou and George (1995). Originally three items were adapted from Scott and Bruce (1994), and rest were developed by Zhou and George. On a five point likert scale ranging from 1, "not at all characteristics," to 5, "very characteristics" Cronbach's alpha was .96.

8. Organisational Innovation

A three-item scale was used to measure organisational innovation. The scale was based on Miller and Friesen (1983) and applied by Garcia- Morales et al. (2008) on a five-point likert scale ranging from 1, “Strongly Disagree,” to 5, “Strongly Agree.”

4.7. Pilot Study

Pilot study is a very common exercise in business research especially in the positivist paradigm. Ticehurst and Veal (2000, p-151), assert that a pilot study is imperative for the reasons listed in Table 4.2 below.

Table 4.2: Purpose of the Pilot Survey

ID	Purpose	Applicable
1	Testing questionnaire wording	Yes
2	Testing questionnaire sequencing	Yes
3	Testing questionnaire layout	Yes
4	Gaining familiarity with respondent	No
5	Testing fieldwork requirement	No
6	Testing and training fieldworkers	No
7	Estimating response rate	Yes
8	Estimating questionnaire completion time	Yes
9	Testing analysis procedure	Yes

Source: Adapted from Ticehurst and Veal (2000, p-151)

Before going to conduct main study, research must confirm the reliability and validity of survey through pilot study. Thus, pilot study is a usual routine in business studies for advancing the instrument. In this research, reliability of the survey was assessed through Cronbach’s alpha and validity of the survey questionnaire did through field experts. In this connection, a few surveys would be sent to university professors and research experts for confirming the face validity. According to Kriel (2006, p-109), pre-testing allows the testing of most aspects of the questionnaire with respect to time taken, ease of completion and ease of data collection.

4.8. Research Protocol

Research protocol describes the procedures and general rules followed for data collection. According to Holloway and Mooney (2004), research protocol is an instrument that is concerned with a systematic review and a piece of original research. Through this instrument, it was ensured that the research study was smoothly and successfully conducted. Indeed, the use of this instrument is to gather reliable data. According to Remenyi *et al.* (1998), a research protocol is important to increase the consistency of data collection and focus the process of data collection. For developing a research protocol, Holloway and Mooney (2004) described several stages including: an introduction, aims and objectives of the study, hypotheses, setting, and the calculation of sample size, research methodology and design, methods used in the statistical analysis, and study schedule. More details are provided in the next chapter.

Table 4.3: Time Schedule for the Research

Study Phase	Activity	Period
Pilot Study	Apply for ethical approval	19/03/2012-23/03/2012
	Contact with participants for their consent	26/03/2012 - 15/04/2012
	Send the survey instrument to participants	15/04/2012 -30/04/2012
	Data coding, entry and cleaning and data analysis	01/05/2012- 10/05/2012
	Writing pilot study results	10/05/2012- 10/06/2012
Main Study	Contact with participants for their consent	11/06/2012 - 11/07/2012
	Send the survey instrument to participants and collections	12/07/2012 - 15/10/2012
	Data coding, entry and cleaning	16/10/2012 - 15/01/2013
	Data analysis	
	Writing main study results and conclusions	16/01/2013 - 15/10/2013
	Thesis submission	16/10/2013 - 15/01/2014

4.9. Reliability and Validity

In business research, positivist approach follows a survey questionnaire for data collection. For the survey questionnaire, reliability is one of the important issues in this domain. Reliability demonstrates accuracy of the measurement, procedures, and the ability to repeat the research. If the same procedure is to be repeated, findings must be same. Thus, it is well known as repeatability and consistency over time. In business research, the extent to which the research is replicable and the research findings can be repeated determines the reliability of the research (Yin, 1994).

In this research, a positivist approach has been adopted which is an efficient way to collect data for specific variables of interest (Collis and Hussey, 2003). In this study, data were collected from the employees of public security sector organisations in the Kingdom of Saudi Arabia. All necessary steps would be followed to collect data and confidentiality would be secured which can reduce bias. However, reliability of the items of the survey instrument reliability could be measured by the internal consistency method (Hussey and Hussey, 1997). This study applied Cronbach's coefficient alpha to measure the internal reliability of the survey. Furthermore, the survey would be assessed by senior experts that are also a well-known method applied to measure internal consistency of the survey questionnaire.

Validity of the research is concerned with the extent of research findings that represent what is happening (Collis and Hussey 2003). In positivist paradigm two ways such, that external and internal were to establish the validity. According to Hussey and Hussey (1997), generalisability is the extent to which conclusions can be made about one thing based on information about another. If a question can be misunderstood, the information is said to be of low validity. In order to avoid low validity, a pilot study would be conducted before full-scale data collection. Through the pilot study, the time horizon would be measured, and language or any other misconceptions were removed.

4.10. Main Study

Main study was followed by pilot study in which reliability and validity of the survey instrument was assessed and confirmed. The main study was conducted in public security sector in the kingdom of Saudi Arabia. In this section, the discussion about population and sample, targeted samples and the data collection procedure has been defined.

4.10.1. Population and Sampling

Research context is important for the research. Population is a set of all individuals (Gilbert, 2001). From them, samples were selected to collect data. These samples can be representative of the whole target population. In positivist approach, sampling is important for an empirical study because the researcher could not cover the whole population (Hussey and Hussey, 1997). However, sampling is a fraction of subjects drawn from a population. For this empirical study, a probable sampling would be done from the employees of public security sector organisations in the Kingdom of Saudi Arabia. Two main types of sampling methods were found in the research namely probability and non-probability method (Bryman & Bell, 2007). Probable sampling, populations members have equally known chances of being selected (Sekaran, 2000). Thus, this study is applying probable sampling where all members have equal right to participate in research.

4.10.2. Targeted Samples

The targeted samples of the main survey would be the members of organisations of public security sector of The Kingdom of Saudi Arabia. In this study, only public sector employees from all over the country would be involved. Large sample of the population would be selected from all categories of employees. According to Powpaka (1998), selecting a large sample is the requirement for chosen analysis techniques such that confirmatory factor analysis and multi-variances analysis.

4.10.3. Data Collection Procedure

Data collection is one of the vital parts of any research studies (Sekaran, 2000). It is concerned with the nature of data. It is the process of collecting opinions from the

respondents on a specific topic to investigate the research problems. In this study, researcher would start the procedure by contacting a selected sample of the population for their willingness to participate. In this regard, queries regarding the instrument and privacy would be followed accordingly. Following proper procedure to getting consent from the participants, a set of the survey questionnaire along covering letter would be handed over. In this regard, information regarding participants would be obtained from the respective departments or their web site through personal visits to the public security sector. In this moment researcher will apply follow up techniques as revealed by Zikmund (2003) that if any respondent give not response or his or her response is slow than researcher should follow through reminders. In this study researcher has prepared plan that after two weeks, a reminder will be sent to remind them to respond. Following to three times if participants did not respond than his or her name would be excluded from the study.

In survey research, a probability sampling method is more appropriate than a non-probability one because ‘the resulting sample is likely to provide a representative cross-section of the whole (Denscombe, 2002, p-12). Furthermore, researchers can make unambiguous statements about ‘the accuracy and validity of the findings from the survey by reference to the degree of error or bias which may be present in it as measured by well understood statistical methods’ (Baker, 2002, p-106). During collections of data, what problems will be faced by researcher would be reported. This will show the interest of the researcher as well participants.

4.10.4. Data Analysis Techniques and Statistical Packages

Before inferring output of data, it would be certain to follow proper procedure to getting accurate results. In this connection coding of the data and cleaning of the data place essential role in the data analysis. Indeed, coding of data involves translating entries on the questionnaire to letters or numbers that guide for translating responses. This is an easy way to process the data further for recording. However, recording of data is concerned transferring information from questionnaires or code sheets to computer files for processing purposes. Through that way, objectives from the data can be easily found. However, in this process the researcher has to be sure to avoid errors while processing the data but human error cannot be avoided. Thus, it has much chance when data is in a large number where

human errors data can be cleaned through double-checking the data entries on the computer files.

In this study, three main stages have been proposed for the data analysis. First, the content and the relevance of the multi-item scales were refined. Second, scales were validated using confirmatory factor analysis (CFA) via structural equation modelling (SEM). Finally, hypotheses were tested using Hierarchical Multiple Regression.

4.11. Ethical Consideration

In social science and business studies, ethical issues play an important role because it deals with human subjects. Ethical consideration required privacy and confidentiality, accuracy and informed consent through all phases of the research. Researchers such as Neuman (1995) reveals that the researcher must protect human rights, guide them and supervise the interests of people. This should be considered in conducting research with human subjects. As stated by Sekaran (2000, p.260-261), the researcher should safeguard human rights by bearing in mind ensuing ethical reflections.

- i. To assure respondents that their information is kept strictly confident.*
- ii. To assure respondents that their personal information will not be solicited.*
- iii. To assure respondents that their information will not be misrepresented or distorted during the study.*
- iv. The researcher should clearly define the purpose of the study without any misrepresentation of the goals.*
- v. The researcher should never violate the self-esteem and self-respect of the respondents.*
- vi. The researcher should get consent prior to collecting the data and should not force respondents to become part of the survey.*

For this research, all ethical requirements would be followed throughout phases of the study. The relevant organisations would grant permission for participants. Addresses of the participant would be obtained from the administration of the respective organisations or their websites. All participants would be assured that anonymity and confidentiality of the responses guaranteed. Finally, anonymity and confidentiality through that do not write their names on the questionnaires and data would be coded.

4.12. Summary

Methodology chapter is considered essential for the researcher, which provides the rationale behind the selection of the research approach. This study revealed the two important research paradigms such that positivists and phenomenological and their philosophical stance had been developed. From a methodological perspective, this study has selected quantitative paradigm with a survey instrument for data collection. However, it is supported by the literature and many researchers in the domain leadership and especially in the transformational leadership have utilised a positivist method. As a result, a positivist approach was deemed appropriate for this study. Researcher has selected sample of employees of the public security sector organisations in the Kingdom of Saudi Arabia. The survey instrument has been developed in nine sections such that 'demography,' 'transformational leadership,' '*intrinsic motivation*,' '*psychological empowerment*' '*perception of support for innovation*,' '*organisational learning*,' '*workplace social relationship*,' '*organisational innovation*' and 'employee creativity.' Before conducting main study, a pilot study was carried out to assess the dependability and legitimacy of the questionnaire. All details relating to practical reflections for example "*sampling and participation, measurement scales and data analysis procedure*" were also examined.. After data collection, statistical package for social sciences (SPSS) version 18.0 was used to analyse the data.. After that, was the discourse on Hierarchical Multiple Regression analysis and tested hypotheses which was the model used.. Lastly, the study presented the ethical matters included in this study.

CHAPTER FIVE: DATA COLLECTION AND ANALYSIS

5.1. Introduction

This chapter presents the results achieving from the collected data and illustrates the process of data analysis from data collection to preparing and testing the research hypotheses. In other to attain the research aims, this chapter is going to analyse and uncover the relationships between independent and dependent variables. For getting the results, this study deals with the group of issues in data collection process for the interest of the assessment and testing the proposed research model. Since the research adapted a survey questionnaire to get objects through quantitative methods. This chapter will discuss the subsequent issues related to analysing the data. Based on quantitative data, various statistical techniques based on statistical package for social sciences (SPSS) version 18.0 of software were used to analyse the data. This chapter comprises of the following sections: introduction, pilot study, main survey study, data collection process, data screening prior to analysis (treatment of missing data, outliers, normality, linearity, and homogeneity), sample characteristics of the respondents and relationships, reliability and validity of the instrument, factor loading and data analysis, hypothesis testing, and conclusions.

5.2. Pilot Study

The essence of the pilot study is to confirm the reliability and validity of the instrument regarding the objects of the study. Prior to collecting full-scale data, researcher conducted a pilot study for confirming the relevant and appropriate scales using for study. This pilot study was conducted during the month of July 2012. Serving the purpose of the piloting is to evaluate the important requirements aimed instrument purification like the words used for question items must be tested. In addition, other consideration such that question sequence, questionnaire layout, familiarity with respondents, questionnaire time taken for the completion, response rate and analysis process are involved (Ticehurst and Veal, 2005).

In this context researchers like Sekaran (2000) revealed it for the evaluation and ensured the instructions, questions and scale of questions as to clear understand.

For conducting a pilot study, researcher distributed 60 questionnaires through personal visits to the randomly selected employees from public security organisation of Saudi Arabia. Researchers have different opinion regarding the sample size for the piloting like Luck and Rubin (1987) suggested being between 10 to 30 and Diamantopoulos & Sigauw (2000) suggested sample size up to 100. Participants were informed to confirm about easy understanding of wording, sequence and layout of the questionnaire. At the end of the questionnaire, a statement was written like “how much time you will take to complete this questionnaire.” Researcher received 49 questionnaires from the participants resulting response rate was about to 82% from which two participants were discarded due to not completing the questionnaire. Therefore, remaining 47 questionnaires were included for the pilot study (see Table 5.1). Researcher found little corrections and suggestions from the respondents, and this might be because of the factors involved in the instrument were widely used in transformational leadership domain. The pilot test revealed that on average, respondents took about 20 to 25 minutes to complete the survey instrument.

Table 5.1: Demographic characteristics of participants (N=47)

<i>Demographic</i>	<i>Category</i>	<i>Frequencies (n) %</i>	
Gender	Male	47	100.0
Age	Less than 21	1	2.1
	21-30	18	38.3
	31-40	13	27.7
	41-50	12	25.5
	51-60	3	6.6
	Total	47	100.0
Social Status	Single	14	29.8
	Married	32	68.1
	Divorced/Widow	1	2.1
	Total	47	100.0
Level of Education	Undergraduate	26	55.3
	Graduate	15	31.9
	Post Graduate	6	12.8
	Total	47	100.0
Full Work Experience	Less than 5 years	14	29.8
	5-10 years	5	10.6
	10-15 years	10	21.3
	15-20 years	4	8.5
	More than 20 years	14	29.8
	Total	47	100.0
Experience with Current Employer	Less than 5 years	21	44.7
	5-10 years	9	19.1
	10-15 years	9	19.1

	15-20 years	1	2.1
	More than 20 years	7	14.9
	Total	47	100.0
How many years in a supervisory position	Less than 5 years	26	55.3
	5-10 years	12	25.5
	10-15 years	3	6.4
	15-20 years	3	6.4
	More than 20 years	3	6.4
	Total	47	100.0
Number of Staff under your supervision	Less than 5 years	31	66.0
	5-10 years	7	14.9
	10-15 years	5	10.6
	15-20 years	0	0.0
	More than 20 years	4	8.5
	Total	47	100.0
How often meeting with your direct manager	Never	2	4.3
	Rarely	4	8.5
	Occasionally	11	23.4
	Very Often	6	12.8
	Every Day	24	51.1
	Total	47	100.0
Leadership Training	1-4 weeks	28	59.6
	4-8 weeks	8	17.0
	8-12 weeks	2	4.3
	More than 12 weeks	9	19.1
	Total	47	100.0

Researcher conducted reliability tests through Cronbach's α for the purification process of the instrument. According to Peter (1979) that the content validity of the questionnaire can be measured through reliability (i.e. Cronbach's α) that ensures of the instrument that 'measures are free from the error and therefore yields consistent results.' From this study researcher found overall reliability $\alpha = .95$ which is above than the recommended threshold 0.7 (Nunnally and Bernstein, 1994). However, specific construct reliability ranges from 0.708 to 0.883 (see Table 5.2).

Table 5.2: Cronbach's Alpha Reliability

S. No.	Variables	Cronbach's Alpha Reliability
1	Organisational Innovation	.822
2	Creativity	.880
3	Idealised Attribute	.761
4	Idealised behaviour	.914
5	Inspirational Motivation	.776
6	Intellectual Stimulation	.773
7	Individual Consideration	.760
8	Intrinsic Motivation	.858
9	Meaning	.869
10	Competition	.972
11	Self-determination	.708
12	Impact	.825
13	Perception of Support	.828
14	Employee Learning	.786
15	Workplace Relations	.800

Additionally, researcher calculated average time for data collection and reviewed instrument design. It was confirmed that length of the instrument is satisfied, and all paid equal concentration to the questions. This was measured through the start and end of the

instrument. However, it was suggested to translate the questionnaire for local Arabic language for full-scale data collection process. Based on piloting study result and comments researcher concluded the normal layout, wording and number of items of the instrument was retained for collecting full-scale data (see Appendix-1). Finally, researcher followed to the literature for not inviting the respondents who participated in the pilot study because they might *influence the later behaviour of the respondents if they have already been involved in the pilot study* (Haralambos and Holborn, 2000).

5.3. Main Study

After assessing reliability and validity of the survey questionnaire in a pilot study, researcher carried out main study. The main study was conducted in public security sector of The Kingdom of Saudi Arabia. In the following section, researcher will discuss the data collection process for the main study.

5.4. Data Collection Process

A great variety of literature has been reviewed and developed a theoretical framework. This study has been proposed hypotheses with the support of the relationship of variables such that employee perception of support for innovation, empowerment, intrinsic motivation, organisational learning and workplace relationship on follower's creativity and organisational innovation. To examine these hypotheses, researcher adapted measurement scales and developed a survey questionnaire for data collection (See Appendix1). Instrument for this study was originally written in English and has been translated in native language (Arabic) of the participants (See Appendix2). However, problems can be aroused in the process of translation. Such problems might be of grammatical structure, syntax, words, phrases and colloquialisms (Brislin, 1970; 1980). Following to literature, researcher applied back translation technique which was done by experienced and qualified translators (Brislin, 1970; Campbell, Brislin, Stewart and Werner, 1970). After following due procedure researcher tested the Arabic language questionnaire through a pilot study to ensure that the target subjects understand the questions.

For the collection of data, researcher proposed to distribute survey questionnaire by personal visit to employees of public security sector organisations of Kingdom of Saudi Arabia. The main reason for selecting the context of the study in public security sector

institutions is to investigate the impact of transformational leadership towards the individual learning and organisational innovation in a different culture like Arab culture. Furthermore, these organisations delivering services to all public and private institutions, therefore, there is a need of examining the effect of transformational leadership on followers' creativity. Finally, there is a need for a more generalizable research framework that systematically investigates the causes and consequences of the transformational leadership effects towards the individual's learning and organisational innovation in Arab cultures. For the selection of samples, researcher tried to cover all regions of the country.

For a collection of data, random sampling has been done and before collecting data permission was granted from the authorities of respective sections through the letter of the researcher supervisor. Before distributing the survey questionnaire, the researcher applied due process such that before issuing a survey to the participants, the researcher confirmed the voluntary participation for the study. All participants were informed to participate free, and if any participant can withdraw at any time, he or she has been allowed. This procedure lasted for four months that started from the month of August 2012 and November 2012. After collecting survey from the participant, researcher developed coding (see Appendix 3) for entering data into SPSS spreadsheet of Statistical Package for Social Science (SPSS) 18.0 version software. SPSS spreadsheet developed for question items because of any information about the case can be identified across the data editor. Researcher prepared column with the questionnaire items and all items coded with numbers along with an abbreviated format. Similarly in the label column question items were written. The value section of the column was developed from "1 to 5" with five-point options of like scale like strongly disagree to strongly agree.

5.5. Data screening prior to Data Analysis

Data screening is one of the important steps for inferring accurate results. The main reason is to build confidently that all data are entered correctly and if any errors occur can be handled. In quantitative methods of the study researcher also wondering to look the data as a normally distributed because accuracy of data is prior for investigating the responses of samples. This is because of having to get honest results for the outcomes and to reveal what is not apparent as it is to portray the actual data for the "hidden" effects are easily

overlooked, and these issues must be considered (Hair et al., 2006, p-37). Researchers suggested screening the data through the issues of any missing data, outliers, linearity, normality and homoscedasticity (Tabachnick and Fidell, 2007; Hair et al., 2006). This research is following to above researchers and started to screen out data from the treatment of missing data.

5.5.1. Treatment of Missing Data

Missing data is one of the most pervasive issues which should be considered prior because of persistent problems in data analysis. It happens commonly because of certain reasons like having long questionnaire and/or participants who accidentally miss out questions or error or data operator failure in the data entry. These types of respondents can deviate the results from their original objectives. In social science research, dealing with missing data is critical and essential for researchers because of providing large variance that may be causes of biases and for results generalisation. However, according to Tabachnick and Fidell (2007, p-62), *missing data seriousness depend on the pattern of missing data, how much is missing, and why it is missing. However, the pattern is more important than the number missing.* Dealing with the missing data, researchers suggested using mean of the scores on the variance or removing of the sample that do not respond (Stevens, 1992; Norusis, 1995). In the literature, Tabachnick and Fidell, (2007, p-63) *suggested if only few data points, say, 5% or less, are missing in a random pattern from a large data set; the problem are less serious and almost any procedure for handling missing value yields similar results.* This study followed to take out participants from the study because of finding less than 5%. In this regard, researcher applied SPSS package of missing value and found missing items in all question items of variables that are less than 5% of the total data (see Appendix 4). From the results of missing test, the researcher found eleven participants involved in, thus, researcher followed to literature as discussed above and removed eleven items which showed that removal of these missing data out of 530 samples is 2.07% which does not cause problems with the outcome of the analysis.

5.5.2. Outliers

In data, outliers are commonly known as those participants whose score is distinct from the rest of participants. According to Hair et al. (2006, p-73) *an outlier is judged to be an unusually high or low value on a variable, or a unique combination of values across*

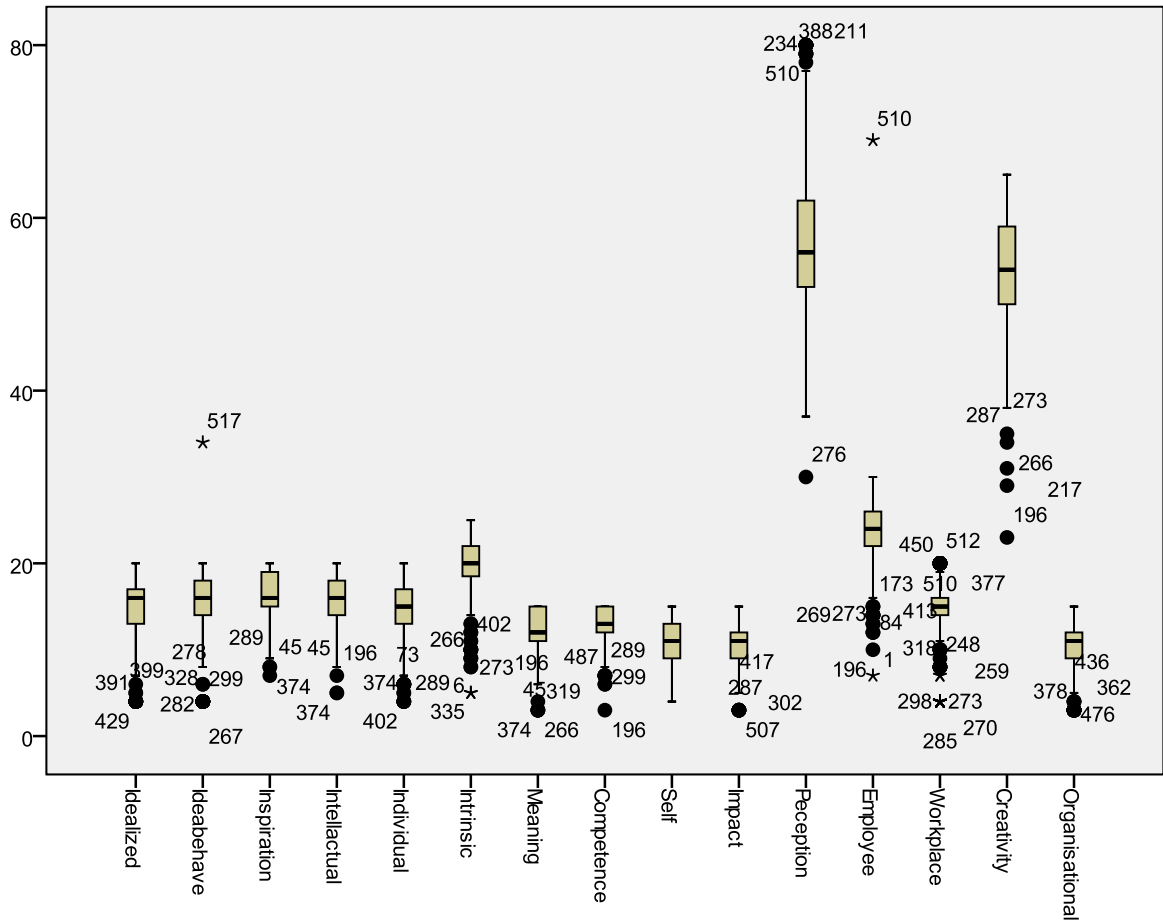
several variables that make the observation stand out from the others. Outliers exist in quantitative data because of different options in the questionnaire. The literature support the presence of four main outliers: indirect data entry, failure of specifying codes for missing values with might be treated as real data, entering observation which is not part of population from which sample is extracted including observation from population but the distribution for the variable in the population has extreme values than normal distribution (Hair et al., 2006; Tabachnick and Fidel, 2007). However, the identification of outliers is different in quantitative methodologies like an outlier which is the case with an extreme value on one variable known as univariate or such a strange combination of scores on two or more variables known as multivariate Tabachnick and Fidel (2006, p-72).

Researchers suggested that outliers in data set are not beneficial or problematic, but they can bias the mean and inflate the standard deviation (Hair et al., 2006; Field and Hole, 2003). If outliers locate in dataset, researcher must behave accordingly to get no effect on statistical inferences. Thus, statistician proposed to behave data of outliers as to infer the suitable results. There are three methods to detect outliers (Field, 2006): univariate (a case of an intense value on single variable), bivariate (a case of an intense value on two variables) and multivariate (a case of an intense value on three variables). In the literature no accepted rule is available to detect outliers however, a widely accepted rule of thumb is available like Hair et al. (2006, p-75) described that if standard score for small sample size (80 or less) is + 2.5 or beyond, while for large sample size, standard scores can be considered up to value more than +3.0 standard deviations away from the mean is regarded as an outlier.

In this research, researcher applied univariate outliers first to find out the outliers with an extreme value on one variable. By applying a graphical method for detecting the univariate outliers, researcher confirmed their effect on the objectives of the study. Inbox plot (see Figure 5.1), nine univariate outliers were found which marked with an asterisk.

Bivariate outliers can be identified by applying a pair of variables jointly in a scatter plot in which if the case(s) fall markedly outside the range of the other observations will be seen as isolated points (Hair *et al.*, 2006).

Figure 5.1: Univariate Outliers



In quantitative methods of research multivariate outliers are more important and useful because of a combination of scores on two or more variables. Indeed, univariate outliers deal with a large number of graphs and limited numbers of variables observations. According to Hair *et al.* (2006) and Field (2006) multivariate outliers can be identified by Mahalanobis D^2 measure in which assessment of each observation can be done across a set of variables. In this test if D^2/df (degree of freedom) value exceeds 2.5 in small samples and 3 or 4 in large samples it can be designated as a possible outlier (Hair, *et al.*, 2006, p-75). This research applied Mahalanobis's distance test to find multivariate outliers confirming their effect on the objectives of the study (see Appendix 5). Researcher confirmed the factors of univariate outliers and found few extra outliers (see Table 5.3).

From the above analysis, researcher found seven outliers from univariate analysis. After univariate analysis researcher applied multivariate analysis and found twelve samples as outliers from that seven of univariate matched in this analysis. All these samples including in both of total sixteen have been taken out from the study and finally researcher used 503 samples for the prior consideration of inferring results for the data.

Table 5.3: Univariate and Multivariate Outliers Results

Univariate Outliers		Multivariate Outliers		
Case with standard values exceeding + 2.5		Case with a value of D^2/df Greater than 2.5 (df = 15) ^a		
		Case	D^2	D^2/df
IDAT	No cases	01	59.42	3.961
INBE	517	45	58.56	3.904
INMO	6, 335	130	41.72	2.781
INST	No cases	186	49.40	3.293
INCO	No cases	196	45.53	3.035
INTM	No cases	211	45.92	3.061
MENG	No cases	273	53.05	3.536
COMP	No cases	278	43.42	2.894
SEDE	No cases	289	42.40	2.826
IMPT	No cases	318	58.44	3.896
PESI	No cases	374	56.58	3.772
EMLE	1, 196, 510	510	154.92	10.338
WOSR	270,273,285,289,298			
CRTY	No cases			
ORIN	No cases			

a. Mahalanobis D^2 value based on the 15 variable perceptions.

Note: **IDAT**= Idealised Attribute; **INBE** = Idealised Behaviour; **INMO** = Inspirational Motivation; **INST** = Intellectual Stimulation; **INCO** = Individual Consideration; **INTM** = Intrinsic Motivation; **MENG** = Meaning; **COMP** = Competition; **SEDE** = Self-determination; **IMPT** = Impact; **PESI** = Perception of Support for Innovation; **EMLE** = Employee Learning; **WOSR** = Workplace Social Relationships; **CRTY** = Creativity; **ORIN** = Organisational Innovation.

5.5.3. Normality

This study focused to the normality of data after discovering and taking out the missing and the outliers from the data to confirm normal distribution. In the literature, the normality has been considered for the variation and relationships of the variables which are to be a fundamental assumption in multivariate analysis (Hair et al., 2006; Kline, 2005; Tabachnick & Fidell, 2007). Normality is known as the assumption regarding the data distribution where each item should be in all linear combination of items (Hair et al., 2006; Tabachnick & Fidell, 2007). According to the Hair et al., (2006, p. 79) *'if the variation from the normal distribution is sufficiently large, all resulting statistical test are invalid, because normality is required to use the F and t statistics.'* In a statistic, normality data can be measured through Kurtosis and Skewness test and Kolmogorov and Shapiro method (Tabachnick and Fidel, 2007; Field, 2006; Hair et al., 2006) which is discussed in the methodology chapter. The purpose of this test to see the violation of normality within multivariate analysis that might be the case of underestimation of fit indices and standardised residuals of estimations. According to Hair et al. (2006, p. 80) if the variable/items satisfies the multivariate normality than it also satisfies the univariate normality, while reverse is not necessarily true.

The research followed to Kurtosis and Skewness test which compare the data distribution and normal distribution. The idea regarding Kurtosis is an indication of height of the distribution like "peakness" or "flatness" and Skewness is an indication towards the balance and the symmetry of the distribution. In that situation Hair et al. (2006, p-80) described that positive kurtosis values indicate a peaked distribution, and negative kurtosis value suggest a flatter distribution. For Skewness, if the distribution has skewed values like the values positively are clustered to the left of the distribution; this indicates a positive skew. The range of results of both is +/- 2.58 at a significant level. Researcher applied SPSS 18.0 software version for the data and found all variables normally distributed (see Table 5.4). However, the results of Skewness and Kurtosis were found mostly under required limit and have mixed such that negative and positive results. According to Pallant (2007, p. 56) negative or positive Skewness and kurtosis does not represent any problem until and unless they are within normal range. Also, negative or positive values of Skewness and kurtosis reflect the underlying nature of the construct being measured. For example, in this study,

the negative skewed score of construct perceived usefulness represents that individuals within the sample are agreed more than disagreed towards the acceptance due to the usefulness. In statistics, small sample size compared to large sample size shows serious effect on normality. Small sample consists of 50, and large sample is 200 or more than that. This study has a sample size of 503 where presence of little non-normal univariate distribution may be avoidable.

Table 5.4: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Variance	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
IDAT	503	4.00	20.00	15.1451	3.46537	12.009	.067	.109	.542	.217
INBE	503	4.00	20.00	15.6998	3.29544	10.860	.471	.109	.163	.217
INMO	503	9.00	20.00	16.3439	2.81130	7.903	-.530	.109	-.430	.217
INST	503	8.00	20.00	15.5467	2.88375	8.316	-.268	.109	-.535	.217
INCO	503	4.00	20.00	14.9881	3.21350	10.327	-.473	.109	.269	.217
INTM	503	9.00	25.00	20.1531	3.32359	11.046	-.625	.109	.634	.217
MENG	503	3.00	15.00	12.5070	2.34127	5.482	-.948	.109	.864	.217
COMP	503	7.00	15.00	12.9364	1.93622	3.749	-.669	.109	-.146	.217
SEDE	503	4.00	15.00	11.1093	2.52517	6.376	-.353	.109	-.146	.217
IMPT	503	3.00	15.00	10.7038	2.63552	6.946	-.373	.109	-.212	.217
PESI	503	30.00	80.00	57.2266	8.47026	71.745	.478	.109	.394	.217
EMLE	503	12.00	30.00	24.1750	3.52978	12.459	-.742	.109	.799	.217
WOSR	503	4.00	20.00	14.9085	2.89724	8.394	.597	.109	.416	.217
CRTY	503	29.00	65.00	53.9145	6.74955	45.556	-.243	.109	-.054	.217
ORIN	503	3.00	15.00	10.3598	2.85920	8.175	-.598	.109	-.018	.217
Valid N (list wise)	503									

Valid N 503 (list wise)

Note: **IDAT**= Idealised Attribute; **INBE** = Idealised Behaviour; **INMO** = Inspirational Motivation; **INST** = Intellectual Stimulation; **INCO** = Individual Consideration; **INTM** = Intrinsic Motivation; **MENG** = Meaning; **COMP** = Competition; **SEDE** = Self-determination; **IMPT** = Impact; **PESI** = Perception of Support for Innovation; **EMLE** = Employee Learning; **WOSR** = Workplace Social Relationships; **CRTY** = Creativity; **ORIN** = Organisational Innovation.

For confirming the normality of data, the researcher used Kolmogorov and Shapiro method as well. This suggests that if all variables are significant than data showed normal distributed (Field, 2006). According to Field (2006, p.93), this test is very sensitive to a large sample in which minor deviation from the normality show this test as significant. Thus K-S test does not reveal exit from normality of data. By applying the test of normality through SPSS 18.0 software version for the data, researcher found all variables significant which are evidence for normally distribution of data (see Table 5.5).

Table 5.5: Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
IDAT	.133	503	.000	.918	503	.000
INBE	.149	503	.000	.875	503	.000
INMO	.133	503	.000	.935	503	.000
INST	.093	503	.000	.964	503	.000
INCO	.083	503	.000	.963	503	.000
INTM	.140	503	.000	.939	503	.000
MENG	.160	503	.000	.883	503	.000
COMP	.195	503	.000	.869	503	.000
SEDE	.119	503	.000	.950	503	.000
IMPT	.134	503	.000	.962	503	.000
PESI	.084	503	.000	.977	503	.000
EMLE	.128	503	.000	.953	503	.000
WOSR	.186	503	.000	.855	503	.000
CRTY	.087	503	.000	.971	503	.000
ORIN	.178	503	.000	.941	503	.000

a. Lilliefors Significance Correction

Note: **IDAT**= Idealised Attribute; **INBE** = Idealised Behaviour; **INMO** = Inspirational Motivation; **INST** = Intellectual Stimulation; **INCO** = Individual Consideration; **INTM** = Intrinsic Motivation; **MENG** = Meaning; **COMP** = Competition; **SEDE** = Self-determination; **IMPT** = Impact; **PESI** = Perception of Support for Innovation; **EMLE** = Employee Learning; **WOSR** = Workplace Social Relationships; **CRTY** = Creativity; **ORIN** = Organisational Innovation.

5.5.4. Linearity

Linearity refers correlations among the variables that is necessary to know the levels of relationships among the variables. For the survey questionnaire, an implicit assumption of all multivariate techniques is based on linearity. According to Hair et al. (2006, p.85) that an implicit assumption of all multivariate techniques based on co-relational measures of association, including multiple regression, logistic regression, factor analysis, and structural equation modelling, is linearity. Many researchers proposed Pearson's Correlation test to examine the linearity of variables (Tabachnick and Fidel, 2007; Field, 2006; Hair et al., 2006). Following to above researchers, this study applied SPSS 18.0 version software to find the relationship among the variables through Pearson's Correlations. Results showed that all variable are likely linear with each other (see Table 5.6).

Table 5.6: Pearson's Correlations

S.No	Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	Organization Innovation	1														
2	Creativity	.269**	1													
3	Idealised Attribute	.050	.171**	1												
4	Idealised behaviour	.100*	.255**	.258**	1											
5	Inspirational Motivation	.203**	.270**	.249**	.278**	1										
6	Intellectual Stimulation	.123**	.288**	.239**	.269**	.500**	1									
7	Individual Consideration	.167**	.279**	.175**	.214**	.503**	.678**	1								
8	Intrinsic Motivation	.055	.290**	.161**	.220**	.246**	.450**	.446**	1							
9	Meaning	.256**	.347**	.081	.198**	.219**	.161**	.198**	.347**	1						
10	Competition	.108*	.389**	.236**	.187**	.241**	.351**	.302**	.470**	.476**	1					
11	Self-determination	.281**	.301**	.276**	.194**	.120**	.274**	.337**	.312**	.336**	.454**	1				
12	Impact	.282**	.208**	.158**	.165**	.140**	.269**	.352**	.303**	.194**	.312**	.537**	1			
13	Perception of Support	.478**	.312**	.063	.103*	.157**	.215**	.243**	.085	.264**	.145**	.355**	.366**	1		
14	Employee Learning	.316**	.552**	.053	.215**	.234**	.207**	.225**	.255**	.418**	.367**	.346**	.308**	.459**	1	
15	Workplace Relations	.144**	.134**	.014	.042	-.031	.098*	.082	.086	.081	.062	.135**	.200**	.269**	.132**	1

5.5.5. Homoscedasticity

The concept of homoscedasticity is homogeneity of variance of dependent variables with independent variables. Researchers have well-defined that homoscedasticity is the assumption of normality related with the supposition that the dependent variable(s) display an equal variance across the number of independent variables (Hair et al., 2006, p.83). For multiple regressions, the assumption of equal variation between variables is pre-requisite (Field, 2006). Researchers like Tabachnick and Fidell (2007, p.85) defined homoscedasticity as variability in scores for one variable roughly same to the values of all other variables. However, if multivariate analysis is more, then the homoscedasticity is also known heteroscedasticity and can create a serious problem (Hair et al., 2006). Researchers proposed that heteroscedasticity be caused either by presence of non-normality or higher error of measurement at some level in independent variable(s) (Hair et al., 2006; Tabachnick & Fidell, 2007). In statistics, test of homogeneity can be done by Levine's test of homogeneity of variance. By applying this test, researcher confirmed the results of variability of dependent variables with independent variables in this study. Researcher applied Levene's test for the variables was computed across non-metric variable (gender) as part of t-test. Results found scores (see Table 5.7) for Inspiration, Intellectual and Workplace were higher than the minimum significant value i.e. $p < 0.05$. It suggest that variance for all the variables was equal within groups of male and female and had not violated the assumption of homogeneity of variance. This test is also considered to be sensitive like Kolmogorov-Smirnov and Shapiro-Wilk test with respect to the sample size and can be significant for large sample (Field, 2006, p.98). Therefore, for the current study which has sample of 503, significance of few constructs in Levene's test does not represent the presence of substantial non-normality within sample.

Table 5.7: Test of Homogeneity of Variance

		Levene Statistic	df1	df2	Sig.
Idealise	Based on Mean	.799	4	498	.526
	Based on Median	.732	4	498	.571
	Based on Median and with adjusted df	.732	4	482.626	.571
	Based on trimmed mean	.806	4	498	.522
Ideal behaviour	Based on Mean	.810	4	498	.519
	Based on Median	.719	4	498	.579
	Based on Median and with adjusted df	.719	4	448.486	.579
	Based on trimmed mean	.827	4	498	.509
Inspiration	Based on Mean	3.148	4	498	.014
	Based on Median	2.984	4	498	.019
	Based on Median and with adjusted df	2.984	4	478.455	.019
	Based on trimmed mean	3.132	4	498	.015
Intellectual	Based on Mean	5.599	4	498	.000
	Based on Median	5.685	4	498	.000
	Based on Median and with adjusted df	5.685	4	475.942	.000
	Based on trimmed mean	5.674	4	498	.000
Individual	Based on Mean	2.162	4	498	.072
	Based on Median	1.983	4	498	.096
	Based on Median and with adjusted df	1.983	4	477.125	.096
	Based on trimmed mean	2.046	4	498	.087

Intrinsic	Based on Mean	1.102	4	498	.355
	Based on Median	.610	4	498	.656
	Based on Median and with adjusted df	.610	4	442.915	.656
	Based on trimmed mean	1.008	4	498	.403
Meaning	Based on Mean	3.053	4	498	.017
	Based on Median	2.089	4	498	.081
	Based on Median and with adjusted df	2.089	4	465.853	.081
	Based on trimmed mean	2.649	4	498	.033
Competition	Based on Mean	2.673	4	498	.031
	Based on Median	1.788	4	498	.130
	Based on Median and with adjusted df	1.788	4	325.213	.131
	Based on trimmed mean	2.736	4	498	.028
Self determination	Based on Mean	2.315	4	498	.056
	Based on Median	1.835	4	498	.121
	Based on Median and with adjusted df	1.835	4	487.326	.121
	Based on trimmed mean	2.202	4	498	.068
Impact	Based on Mean	.911	4	498	.457
	Based on Median	.689	4	498	.600
	Based on Median and with adjusted df	.689	4	470.971	.600
	Based on trimmed mean	.847	4	498	.496
Perception	Based on Mean	1.232	4	498	.296
	Based on Median	.925	4	498	.449
	Based on Median and with adjusted df	.925	4	495.659	.449
	Based on trimmed mean	1.220	4	498	.301

Employee	Based on Mean	1.314	4	498	.264
	Based on Median	1.254	4	498	.287
	Based on Median and with adjusted df	1.254	4	487.943	.287
	Based on trimmed mean	1.380	4	498	.240
Workplace	Based on Mean	2.804	4	498	.025
	Based on Median	2.346	4	498	.054
	Based on Median and with adjusted df	2.346	4	450.280	.054
	Based on trimmed mean	2.253	4	498	.062
Creativity	Based on Mean	2.147	4	498	.074
	Based on Median	1.880	4	498	.113
	Based on Median and with adjusted df	1.880	4	476.840	.113
	Based on trimmed mean	2.208	4	498	.067
Innovation	Based on Mean	1.386	4	498	.238
	Based on Median	1.797	4	498	.128
	Based on Median and with adjusted df	1.797	4	493.534	.128
	Based on trimmed mean	1.460	4	498	.213

5.6. Sample Characteristics of the Respondents

Sampling for the quantitative study is imperative where participants were selected from the population to collect data. For this empirical study, a probable sampling has been done from the employees of public security sector organisations of the Kingdom of Saudi Arabia. The main study was conducted from August, 2012 and completed within four months. Researcher used survey questionnaire that were distributed to the employees who were selected by probable sampling. Researcher distributed 1000 samples for this study to the employees of public security sector organisations from all

over the country. Researcher collected 541 questionnaires that showed response rate 54.1%. Researcher discarded 11 questionnaires due to uncompleted or having large number of missing data. By applying missing value techniques, the researcher found 11 missing data which is less than 5% and all these samples also discarded from the study. Researcher also found 16 outliers and all these samples have been taken out from the main study. Finally, 503 samples were selected for the main study data analysis. Details results of demographic data can be shown in (see Table 5.8).

Demographic results showed that all respondents were male 503 (100%) most of them were aged between 21 to 30 years old 194 (38.6%). The majority of the participants were married 359 (71.4%) and graduate 221 (43.9%). However, majority of the participants were experience of less than five years 143 (28.4%) and had experience with present employer less than 5 years 289 (57.5%). According to sample characteristics results, the majority of participants have less than five employees under supervision 285 (56.7%) who have contact with direct manager every day 274 (54.5%). Finally the majority of the respondents have leadership training for 1-4 weeks 313 (62.2%).

Table 5.8: Demographic characteristics of participants (N=503)

<i>Demographic</i>	<i>Category</i>	<i>Frequencies (n)%</i>	
Gender	Male	503	100.0
Age	Less than 21	15	3.0
	21-30	194	38.6
	31-40	169	33.6
	41-50	100	19.9
	51-60	25	5.0
	Total	503	100.0
Social Status	Single	141	28.0
	Married	359	71.4
	Divorced/Widow	3	.6
	Total	503	100.0
Level of Education	Undergraduate	221	43.9
	Graduate	211	41.9
	Post Graduate	71	14.1
	Total	503	100.0
Full Work Experience	Less than five years	143	28.4
	5-10 years	95	18.9
	10-15 years	95	18.9
	15-20 years	60	11.9
	More than 20 years	110	21.9
	Total	503	100.0
Experience with Current Employer	Less than five years	213	42.3
	5-10 years	124	24.7
	10-15 years	97	19.3
	15-20 years	24	4.8
	More than 20 years	45	8.9

	Total	503	100.0
How many years in a supervisory position	Less than five years	289	57.5
	5-10 years	128	25.4
	10-15 years	36	7.2
	15-20 years	29	5.8
	More than 20 years	21	4.2
	Total	503	100.0
Number of Staff under your supervision	Less than five years	285	56.7
	5-10 years	103	20.5
	10-15 years	33	6.6
	15-20 years	34	6.8
	More than 20 years	48	9.5
	Total	503	100.0
How often meeting with your direct manager	Never	19	3.8
	Rarely	30	6.0
	Occasionally	60	11.9
	Very Often	120	23.9
	Every Day	274	54.5
	Total	503	100.0
Leadership Training	1-4 weeks	313	62.2
	4-8 weeks	56	11.1
	8-12 weeks	36	7.2
	More than 12 weeks	98	19.5
	Total	503	100.0

5.7. Reliability and Validity

The main purpose of the examining reliability of the survey is to evaluate the consistency between measurement items. Reliability is concerned with the credibility of data that have been collected by the researcher(s). According to Nunnally (1978) reliability of the measures assesses the consistency of the respondents' answers to all items in the measure. Hair et al. (2006) and Robinson et al. (1991) describe two most common purposes of reliability. First, it estimates the consistency between numbers of measurement items for measuring a variable. Second it shows same correlations if same procedure at two different times applied and found same results. In inferential statistics, reliability means to find the accuracy and consistency of measures relating to the replication of measurement instruments within different samples. The efficient way to measure the reliability is Cronbach's coefficient alpha method which is the easiest way to calculate and well known researcher proposed to do so (Cronbach, 1951; Tabachnick and Fidell, 2007). Researchers have proposed different limit of coefficient like mostly researcher prefer lower limit of Cronbach's alpha reliability is at .7 but in some extent it is acceptable at .6 levels (Robinson et al., 1991; Sekaran, 2000).

By applying Cronbach's Alpha reliability test through SPSS 18.0 version software, the researcher found highly correlated items with their respective variables. Researcher found all variables were above .7, and their range is from .716 to .891 which showed high internal consistency of items of variables. Overall reliability of scales used in this survey questionnaire found that 0.931 shows higher internal consistency among the scales. However, the reliability of individual scales was found different from each other and varied from 0.698 to 0.887 (see Table 5.9), which shows that each scale has an individual internal consistency. This shows that the survey instrument has a high level of internal consistency (Field, 2006).

The measurement of validity of the instrument confirms that the findings are a real representation of the concept of the interest (Hair et al., 2006; Collis & Hussey, 2003; Bryman & Bell, 2007). Therefore, before inferring the results, it is essential to confirm the identity of measurement. A test of validity should be capable of confirming the concepts already known (Bannister and Mair, 1968). In business and social science researches, two common test are applied to measure the reliability of an instrument: content validity and construct validity. According to Hair et al. (2006, p. 136) that the content validity is known as face validity which is a qualitative assessment of the

relationship between items and the corresponding construct through rating by experts, judges, and pre-tests with a multiple subpopulations. In quantitative measurement of scale, content validity should be the first step while establishing the relationship between the construct and its measuring items. If measurement scale does not possess content validity, it cannot possess construct validity no matter what the statistical analysis indicates (Graver & Mentzer, 1999, p.35).

Table 5.9: Cronbach's Alpha Reliability

S. No.	Variables	Cronbach's Alpha Reliability
1	Organisational Innovation	.886
2	Creativity	.891
3	Idealised Attribute	.731
4	Idealised behaviour	.784
5	Inspirational Motivation	.822
6	Intellectual Stimulation	.744
7	Individual Consideration	.805
8	Intrinsic Motivation	.862
9	Meaning	.852
10	Competition	.878
11	Self-determination	.811
12	Impact	.854
13	Perception of Support	.813
14	Employee Learning	.785
15	Workplace Relations	.716

For this study researcher established the content validity through literature from where researcher extracted items from the transformational leadership literature through rigorous review process (see literature review chapter and instrument development in the methodology chapter). After developing questionnaire, researcher asked experts of the domain from the researcher's university who were already familiar with the topic to evaluate the measurement items and point out whether the items appeared to be logical

valid or not. Researcher found valuable suggestions from the field experts. However, all the items relevant to the constructs were widely accepted in the literature, therefore, few suggestions were received and incorporated in the final questionnaire.

Construct validity is an approach of items of measurement to the interest of measurement. Researchers like Garver & Mentzer (1999, p.34) defined construct validity as degree to which a set of items measures what they intends to measure. Construct validity is commonly also known as an external validity of the instrument which is quantitatively calculated by observing the correlation between theoretically underpinned set of measurement items (Hair et al., 2006; Pallant, 2007). According to Reige (2003) external validity can support to results for generalisability but in literature researchers are anxious regarding external validity because of doing same experiments occur from the other persons, settings and future situations results must come same. If same results may not be than validity of the questionnaire is in risk. Researcher followed to literature and applied suggestion which described by Belson (1986) that, respondents who completed questionnaires did so accurately and second samples who fail to return their questionnaire would have given the same distribution of answers as did the returnees. In the literature, construct validity can be examined through convergent validity, discriminant validity and nomological validity (Campbell et al., 1959; Peter, 1981). At this stage, researcher computed convergent validity to assess the extent through which measuring items of the same concept were correlated. By applying SPSS reliability test researcher computed correlations of measurement items (see Table 5.10, 5.11, 5.12, and 5.13) all the items were correlated medium to high with their relevant construct. The inter-item-correlation for all the constructs was between medium to high level.

Table 5.10: Pearson's Correlation of Individual Items

Items	I1	I2	I3	B1	B2	B3	M1	M2	M3	M4	S1	S2	S3	C1	C2	C3	C4
I1	1																
I2	.439**	1															
I3	.449**	.547**	1														
B1	.158**	.188**	.179**	1													
B2	.087	.153**	.104*	.500**	1												
B3	.109*	.189**	.152**	.561**	.644**	1											
M1	.167**	.193**	.159**	.260**	.127**	.166**	1										
M2	.123**	.143**	.095*	.238**	.132**	.226**	.522**	1									
M3	.147**	.213**	.166**	.261**	.100*	.138**	.616**	.580**	1								
M4	.173**	.118**	.125**	.225**	.153**	.132**	.489**	.488**	.533**	1							
S1	.227**	.165**	.098*	.250**	.141**	.124**	.245**	.221**	.290**	.290**	1						
S2	.159**	.075	.132**	.219**	.146**	.131**	.183**	.183**	.294**	.287**	.532**	1					
S3	.155**	.139**	.143**	.229**	.046	.135**	.300**	.299**	.404**	.332**	.375**	.482**	1				
C1	.203**	.001	.034	.126**	.028	.046	.307**	.233**	.400**	.342**	.320**	.338**	.433**	1			
C2	.126**	.023	.115**	.185**	-.009	.117**	.207**	.291**	.340**	.289**	.366**	.467**	.454**	.621**	1		
C3	.087*	.083	.079	.250**	.135**	.137**	.350**	.366**	.414**	.393**	.454**	.377**	.414**	.430**	.535**	1	
C4	.203**	.111*	.169**	.303**	.141**	.138**	.309**	.297**	.342**	.314**	.353**	.332**	.418**	.460**	.460**	.546**	1

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Table 5.11: Pearson's Correlation of Individual Items

Items	T1	T2	T3	T4	T5	G1	G2	G3	C1	C2	C3	S1	S2	S3	P1	P2	P3
T1	1																
T2	.630**	1															
T3	.543**	.651**	1														
T4	.490**	.495**	.576**	1													
T5	.422**	.624**	.619**	.573**	1												
G1	.332**	.275**	.253**	.246**	.250**	1											
G2	.280**	.160**	.182**	.248**	.207**	.597**	1										
G3	.297**	.231**	.279**	.219**	.214**	.653**	.728**	1									
C1	.351**	.298**	.306**	.348**	.305**	.481**	.391**	.437**	1								
C2	.315**	.331**	.358**	.323**	.322**	.384**	.318**	.374**	.793**	1							
C3	.427**	.318**	.362**	.357**	.353**	.332**	.285**	.385**	.651**	.678**	1						
S1	.294**	.271**	.245**	.288**	.281**	.357**	.263**	.317**	.446**	.497**	.490**	1					
S2	.227**	.196**	.248**	.263**	.156**	.273**	.246**	.284**	.325**	.372**	.385**	.633**	1				
S3	.141**	.109**	.207**	.165**	.183**	.142**	.214**	.219**	.211**	.232**	.260**	.488**	.658**	1			
P1	.241**	.164**	.205**	.171**	.153**	.142**	.148**	.181**	.267**	.281**	.345**	.379**	.402**	.379**	1		
P2	.248**	.239**	.291**	.181**	.202**	.137**	.160**	.135**	.215**	.242**	.268**	.337**	.420**	.484**	.631**	1	
P3	.211**	.242**	.277**	.196**	.174**	.128**	.159**	.164**	.146**	.250**	.219**	.325**	.422**	.457**	.568**	.780**	1

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Table 5.12: Pearson's Correlation of Individual Items

Items	S1	S2	S3	S4	S5	S6	S7	S8	S9	E1	E2	E3	E4	E5	W1	W2	W3
S1	1																
S2	.531**	1															
S3	.145**	.079	1														
S4	.080	.113*	.308**	1													
S5	.200**	.141**	.246**	.350**	1												
S6	.243**	.194**	.189**	.427**	.578**	1											
S7	-.045	-.061	.272**	.466**	.221**	.273**	1										
S8	.190**	.326**	.211**	.149**	.271**	.253**	.123**	1									
S9	.048	.055	.207**	.300**	.259**	.329**	.318**	.319**	1								
E1	.416**	.371**	.197**	.095*	.155**	.083	-.064	.411**	.221**	1							
E2	.358**	.330**	.081	.138**	.072	.099*	.028	.274**	.223**	.636**	1						
E3	.238**	.268**	.138**	.051	.061	-.028	-.032	.331**	.127**	.451**	.378**	1					
E4	.180**	.187**	.100*	.178**	.121**	.077	.184**	.103*	.085	.216**	.159**	.327**	1				
E5	.298**	.223**	.038	.117**	.112*	.074	-.024	.235**	.128**	.358**	.276**	.362**	.543**	1			
W1	.135**	.132**	.023	.037	.003	.035	-.104*	.075	.154**	.099*	.141**	.072	.103*	.207**	1		
W2	.225**	.170**	.038	-.061	.005	.040	-.104*	.069	-.019	.117**	.103*	.110*	.032	.164**	.552**	1	
W3	.154**	.200**	.055	.047	.066	.078	-.047	.123**	.116**	.160**	.112*	.087	.009	.144**	.539**	.624**	1

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Table 5.13: Pearson's Correlation of Individual Items

Items	R1	R2	R3	R4	R5	R6	R7	R8	R9	N1	N2	N3
R1	1											
R2	.692**	1										
R3	.582**	.589**	1									
R4	.576**	.627**	.587**	1								
R5	.481**	.509**	.533**	.628**	1							
R6	.323**	.319**	.336**	.365**	.427**	1						
R7	.305**	.316**	.374**	.327**	.373**	.563**	1					
R8	.342**	.320**	.288**	.368**	.343**	.428**	.466**	1				
R9	.367**	.418**	.377**	.482**	.513**	.433**	.476**	.466**	1			
N1	.024	.045	.080	.052	.060	.225**	.156**	.204**	.092*	1		
N2	.070	.014	.113*	.045	.023	.218**	.125**	.224**	.110*	.753**	1	
N3	.080	.054	.093*	.074	.108*	.174**	.140**	.166**	.107*	.696**	.720**	1

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

5.8. Factor Analysis

In quantitative research, variety of measurement items has been used for their respective constructs. Researchers prefer to test these items for composite factors in the form of existence factors or in new factors. In the research, factor analysis is a well-known technique that is applied for reducing the information having in a measurement of variables in the form of items or identifying groups or cluster of items of variables that can further examine the measurement scales. Reducing the number of items for measurement scales have different purposes. Field (2006, p.619) describes that factor analysis is first, to understand the structure of a set of variable, second, to construct a questionnaire to measure any underlying variables and finally, to reduce the data set to a more manageable size while retaining as much of the original information as possible. However, researchers concluded that factor analysis is for summarising and reducing data.

In this study, researcher approached exploratory factor analysis (EFA) techniques to examine the structure of the measurement items corresponding to the variables presented in the theoretical framework. Among the various methods of extraction researcher selected principal component analysis (PCA) to generate the initial solutions for the exploratory factor analysis. According to Tabachnick & Fidell (2007, p. 635) principal component analysis helps to extract the maximum variance from the data set, in a way that first component extract highest variance and last component extract least

variance. In quantitative data, principal component analysis supports to reduce the large set of variables into a smaller number of components by transforming interrelated variables into new unrelated linear composite variables (Hair et al., 2006; Tabachnick & Fidell, 2007). Researcher used the orthogonal varimax rotational method because of the most commonly variance maximising procedure and had higher generalisability and replicability power compared to the oblique rotational method (Tabachnick & Fidell, 2007; Pallant, 2007).

Several different techniques are to assess the adequacy of extraction and number of factors to confirm the appropriate results. Norusis (1992) Kaiser-Meyer-Olkin (KMO) and Bartlett's test of Sphericity (BTS) test has been recommended to examine the sampling adequacy. For this test value of KMO greater than .6 between the measurement variables relationships have been suggested statistically significant (Tabachnick and Fidell, 2007). However, Hair et al. (2006) recommend BTS test higher than .3.

In this study, researcher has distributed a survey into three parts. In the first part transformational leadership and intrinsic motivation variables have been applied where transformational leadership factor consist of four variables such that idealised influence (idealised attributes and idealised behaviour), inspirational motivation, Intellectual stimulation and individual consideration. The researcher used 25 items for six latent variables. By applying SPSS version 18.0 for windows, this study conducted factor loading through exploratory factor analysis. Researcher run this test for the items derived from the literature and found six factors but deleted three items each from idealised attribute, idealised behaviour and personal consideration factors. The results revealed that KMO value was greater than .6, and Bartlett's test was significant ($p < .005$) which satisfied the initial assumptions for the EFA (see Table 5.14). Results of this test showed that the relationship between items is statistically significant and is suitable for EFA to provide parsimonious set of factors (Tabachnick & Fidell, 2007). However results of Bartlett's test of sphericity indicate that the correlation among the measurement items is satisfactory and are suitable for factor analysis (Hair et al., 2006).

Table 5.14: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.854
Bartlett's Test of Sphericity	Approx. Chi-Square	5093.355
	Df	231
	Sig.	.000

In the second part, psychological empowerment factor was applied which is derived from the literature through four factors such that meaning, composition, self-determination, and impact. By applying SPSS version 18.0 for windows, researcher used 12 items for the four latent variables and results revealed 12 items were considered for four distinct factors. Researcher found the results KMO that has value was greater than .6 and Bartlett's test was significant ($p < .005$) which satisfied the initial assumptions for the EFA (see Table 5.15). Results reveal that the relationship between items is statistically significant and is suitable for exploratory factor analysis.

Table 5.15: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.797
Bartlett's Test of Sphericity	Approx. Chi-Square	3535.696
	Df	66
	Sig.	.000

In the third part all remaining factors such that perception of support for innovation, employee learning, workplace social relationships, creativity and organisational innovation has been considered for factor loading. All the factors have been derived from the literature and conceptualised for transformational leadership (see theoretical framework chapter). From the literature, the researcher adapted items from different studies and found 42 question items for five latent factors. By applying SPSS version 18.0 for windows, this study conducted factor loading through exploratory factor

analysis. The researcher found five factors with 29 items where nine items were loaded with perception of support and innovation factors, five items were loaded with employee learning, three items with workplace social relationships, nine items with creativity and three items with organisational innovation were loaded. The results revealed that KMO value was greater than .6, and Bartlett's test was significant ($p < .005$) which satisfied the initial assumptions for the exploratory factor analysis (see Table 5.16). Results showed a significant relationship between items that is statistically suitable for further analysis.

Table 5.16: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.884
Bartlett's Test of Sphericity	Approx. Chi-Square	9389.357
	Df	406
	Sig.	.000

Apart of KMO and Bartlett's test, most commonly three main criteria such as latent root criterion, percentage of variance criterion and Scree test criterion has been selected to assess the adequacy of extracted factors. According to Hair et al. (2006) that Eigenvalues greater than one satisfies the latent root criterion and solution that accounts 60% or above cumulative variance satisfies the criterion of variance percentage. Whereas Field (2006) suggests the computing the variance for any given measures and communality is one of the important to measure the variance. Researchers like Hair et al. (2007, p.102) described that communality is the total amount of variance an original variables shares with all other variables included in the analysis. According to Field (2006, p.630) a variable that has no specific variance (or random variance) have a communality of 1 and a variable that shares nothing with all other variables would have a communality of 0. Researchers suggested that the items that exhibit communality lower than 0.5 (50%) are considered to be weak items (Hair et al., 2006), but according to sample size 0.3 cut-off value of communality is also accepted in some cases (Pallant and Manual, 2007). Following to researchers, researcher fixed cut off point .5 and found all results above than .5 communality and range of variation showed from .524 to .774 (see Table 5.17).

Table 5.17: Communalities

Items	Initial	Extraction
IDAT1	1.000	.618
IDAT3	1.000	.703
IDAT4	1.000	.703
IDBE2	1.000	.524
IDBE3	1.000	.738
IDBE4	1.000	.781
INMO1	1.000	.698
INMO2	1.000	.679
INMO3	1.000	.747
INMO4	1.000	.586
INST2	1.000	.602
INST3	1.000	.774
INST4	1.000	.596
INCO1	1.000	.706
INCO2	1.000	.743
INCO3	1.000	.682
INCO4	1.000	.690
INTM1	1.000	.644
INTM2	1.000	.768
INTM3	1.000	.727
INTM4	1.000	.647
INTM5	1.000	.700

Extraction Method: Principal
Component Analysis.

For the second part of factor loading, researcher computed the variance for any given measures through the communality that is one of the important to measure the variance. Researchers suggested a communality of 1 and if the items that exhibit communality

lower than 0.5 (50%) are considered to be weak items. In this study, researcher fixed cut off point .5 and found all results above than .5 communality and range of variation showed from .718 to .852 (see Table 5.18).

Table 5.18: Communalities

Items	Initial	Extraction
MENG1	1.000	.722
MENG2	1.000	.810
MENG3	1.000	.831
COCE1	1.000	.831
COCE2	1.000	.852
COCE3	1.000	.732
SEDE1	1.000	.731
SEDE2	1.000	.815
SEDE3	1.000	.777
IMPT1	1.000	.718
IMPT2	1.000	.834
IMPT3	1.000	.834

Extraction Method: Principal

Component Analysis.

In the third part of factor loading, the researcher also used communality to compute the variance. Researchers suggested that the communality is one of the important tools to show the total amount of variance original variables shares with all other variables included in the analysis. This study fixed cut off point .5 and found all results above than .5 communality and range of variation showed from .532 to .819 (see Table 5.19).

Table 5.19: Communalities

Items	Initial	Extraction
PESI5	1.000	.545
PESI7	1.000	.628
PESI8	1.000	.599
PESI9	1.000	.621
PESI11	1.000	.605
PESI12	1.000	.562
PESI14	1.000	.593
EMLE1	1.000	.691
EMLE2	1.000	.617
EMLE3	1.000	.680
EMLE5	1.000	.565
EMLE6	1.000	.615
WOSR1	1.000	.705
WOSR3	1.000	.756
WOSR4	1.000	.744
CRTY1	1.000	.760
CRTY2	1.000	.738
CRTY3	1.000	.675
CRTY4	1.000	.756
CRTY5	1.000	.737
CRTY9	1.000	.717
ORIN1	1.000	.806
ORIN2	1.000	.819
ORIN3	1.000	.786
PESI1	1.000	.536
PESI3	1.000	.532
CRTY6	1.000	.637
CRTY7	1.000	.613
CRTY8	1.000	.579

Extraction Method: Principal
Component Analysis.

After measuring the variance through communalities, researchers applied eigenvalues to assess the adequacy of extraction. According to Tabacknick and Fidell (2007, p.644) a quick estimate of the number of factors is obtained from the size of the eigenvalues reported as part of the initial run with principal component extraction. Researchers like Hair et al. (2006) confirmed that eigenvalues greater than one satisfies the latent root criterion. Thus, eigenvalue greater than one is important and is related with the variance. Researcher applied principal component extraction method to find eigenvalues and while eigenvalue's examination all six factors were extracted whose eigenvalue was greater than 1. Results showed that all items were loaded with respect to the relevant factor (see Table 5.20). However, three items out of 25 were not loaded. Here the researcher could not find any cross loading of factors and results showed that first factor was a high value and then successively smaller values found (see Table 5.21). Results showed that all six factors explained 68.74% that is higher than the recommendations.

Table 5.20: Rotated Component Matrix^a

	Component					
	1	2	3	4	5	6
INTM2	.858					
INTM3	.824					
INTM5	.770					
INTM4	.765					
INTM1	.747					
INMO1		.809				
INMO3		.804				
INMO2		.790				
INMO4		.689				
INCO2			.805			
INCO1			.791			
INCO4			.747			
INCO3			.705			
IDBE4				.863		
IDBE3				.847		
IDBE2				.695		
IDAT4					.822	
IDAT3					.815	
IDAT1					.760	
INST3						.840
INST2						.662
INST4						.656

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 5 iterations.

Table 5.21: Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.540	29.726	29.726	6.540	29.726	29.726	3.453	15.693	15.693
2	2.386	10.846	40.572	2.386	10.846	40.572	2.763	12.557	28.251
3	1.952	8.872	49.444	1.952	8.872	49.444	2.713	12.330	40.580
4	1.610	7.319	56.763	1.610	7.319	56.763	2.137	9.715	50.296
5	1.475	6.703	63.466	1.475	6.703	63.466	2.037	9.261	59.557
6	1.094	4.971	68.437	1.094	4.971	68.437	1.954	8.880	68.437
7	.718	3.262	71.699						
8	.656	2.982	74.681						
9	.612	2.783	77.464						
10	.588	2.671	80.135						
11	.528	2.401	82.537						
12	.489	2.224	84.760						
13	.477	2.170	86.930						
14	.436	1.980	88.910						
15	.399	1.814	90.724						
16	.354	1.607	92.332						
17	.341	1.552	93.884						
18	.330	1.499	95.382						
19	.294	1.337	96.719						
20	.270	1.228	97.947						
21	.250	1.135	99.081						
22	.202	.919	100.000						

Extraction Method: Principal Component Analysis.

In the second part, the researcher also applied eigenvalues to assess the adequacy of extraction. Eigenvalue is a quick estimate of the number of factors where greater than one satisfies the latent root criterion. Researcher applied principal component extraction method to find eigenvalues and during eigenvalue's examination four factors were extracted whose eigenvalue was greater than 1. Results showed that all items were loaded with respect to the relevant factor and could not find any cross loading (see Table 5.22). Results showed that first factor was a high value, and then successively smaller values found (see Table 5.23). Results showed that all four factors explained 79.05% that is higher than the recommendations.

Table 5.22: Rotated Component Matrixa

	Component			
	1	2	3	4
COCE2	.891			
COCE1	.862			
COCE3	.816			
IMPT3		.895		
IMPT2		.890		
IMPT1		.820		
MENG3			.884	
MENG2			.882	
MENG1			.801	
SEDE2				.853
SEDE3				.836
SEDE1				.746

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser
Normalization.

- a. Rotation converged in 5 iterations.

Table 5.23: Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.649	38.743	38.743	4.649	38.743	38.743	2.521	21.011	21.011
2	2.203	18.358	57.101	2.203	18.358	57.101	2.422	20.181	41.192
3	1.383	11.524	68.624	1.383	11.524	68.624	2.386	19.884	61.076
4	1.252	10.431	79.055	1.252	10.431	79.055	2.158	17.979	79.055
5	.520	4.336	83.391						
6	.435	3.626	87.017						
7	.326	2.715	89.732						
8	.323	2.689	92.421						
9	.298	2.480	94.901						
10	.245	2.039	96.940						
11	.208	1.730	98.670						
12	.160	1.330	100.000						

Extraction Method: Principal Component Analysis.

Third part of this research consists of five factors where researcher used 42 items. Researcher calculated eigenvalues to assess the adequacy of extraction because of a quick estimate of the number of factors where greater than one satisfies the latent root criterion. For this test, principal component extraction method to find eigenvalues was applied. Researchers found five factors during eigenvalue's examination whose eigenvalue was greater than 1. All items were loaded with their respective items, but few items were not loaded to any factors that have been deleted (see Table 5.24). However, researcher could not find any cross loading. Results showed that all five factors explained 68.74% results and the first factor was a high value and then successively smaller values (see Table 5.25).

Table 5.24: Rotated Component Matrix^a

	Component				
	1	2	3	4	5
CRTY1	.851				
CRTY5	.845				
CRTY4	.844				
CRTY2	.837				
CRTY9	.835				
CRTY3	.815				
CRTY7	.769				
CRTY6	.767				
CRTY8	.739				
PESI7		.783			
PESI9		.765			
PESI8		.763			
PESI11		.757			
PESI14		.751			
PESI5		.720			
PESI12		.678			
PESI1		.572			
PESI3		.548			
EMLE1			.801		
EMLE3			.790		
EMLE2			.763		
EMLE6			.728		
EMLE5			.717		
ORIN1				.881	
ORIN2				.876	
ORIN3				.854	
WOSR3					.857
WOSR4					.838
WOSR1					.820

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 6 iterations.

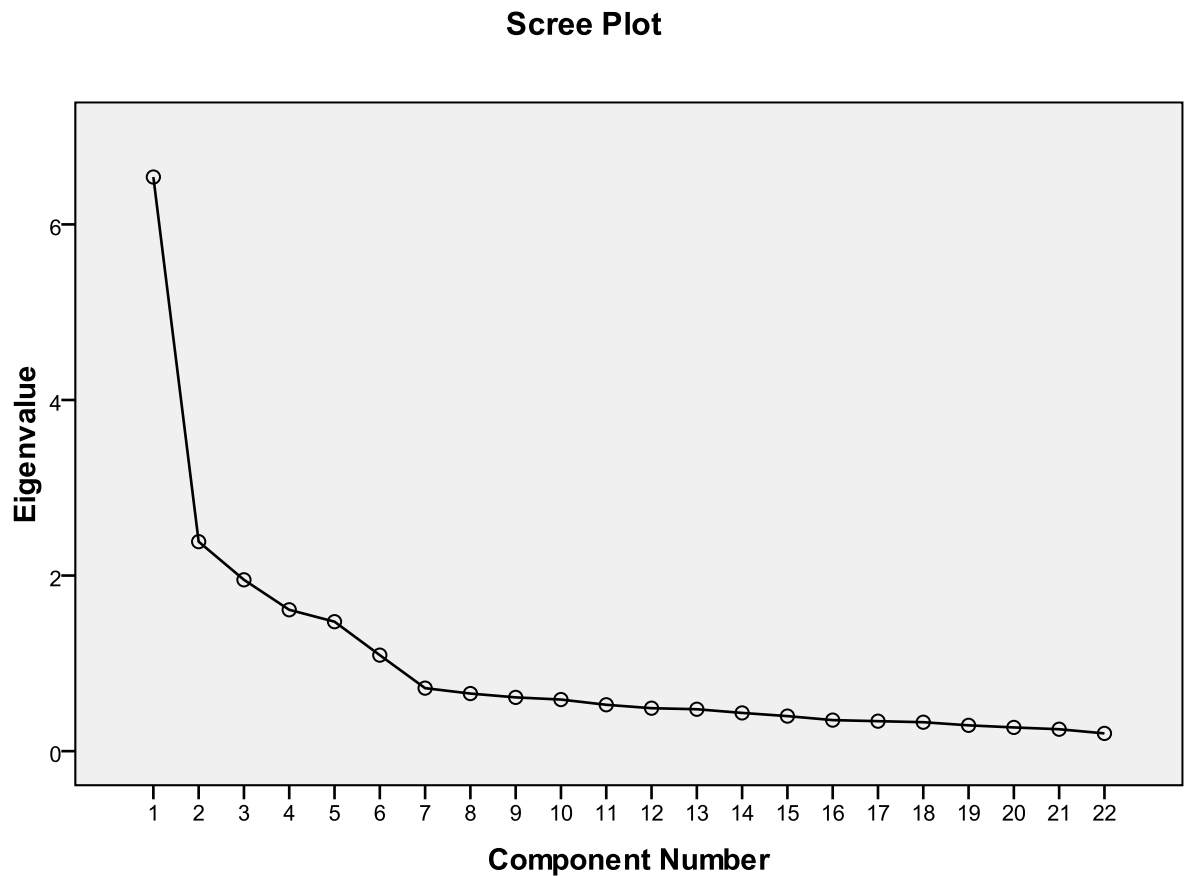
Table 5.25: Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7.925	27.326	27.326	7.925	27.326	27.326	6.114	21.083	21.083
2	4.776	16.471	43.797	4.776	16.471	43.797	4.753	16.391	37.475
3	2.535	8.743	52.540	2.535	8.743	52.540	3.248	11.202	48.676
4	2.098	7.235	59.775	2.098	7.235	59.775	2.704	9.326	58.002
5	1.884	6.498	66.273	1.884	6.498	66.273	2.399	8.271	66.273
6	.948	3.267	69.541						
7	.848	2.925	72.466						
8	.719	2.478	74.944						
9	.624	2.151	77.094						
10	.590	2.035	79.129						
11	.530	1.828	80.957						
12	.474	1.635	82.592						
13	.464	1.601	84.193						
14	.413	1.426	85.618						
15	.402	1.387	87.005						
16	.385	1.327	88.332						
17	.375	1.292	89.625						
18	.351	1.210	90.834						
19	.329	1.136	91.971						
20	.312	1.077	93.048						

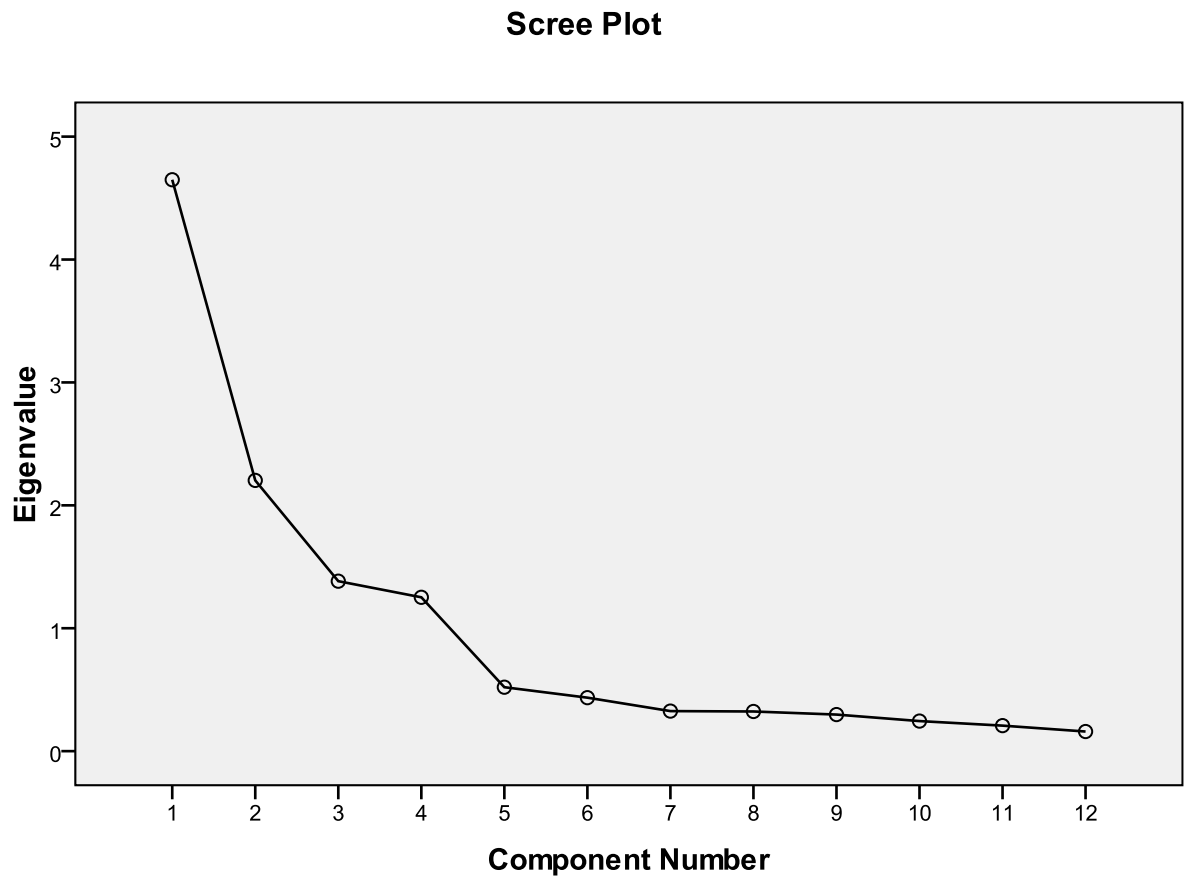
21	.277	.956	94.004					
22	.270	.931	94.934					
23	.263	.906	95.841					
24	.252	.870	96.710					
25	.242	.834	97.544					
26	.214	.738	98.283					
27	.188	.648	98.930					
28	.179	.619	99.549					
29	.131	.451	100.000					

Extraction Method: Principal Component Analysis.

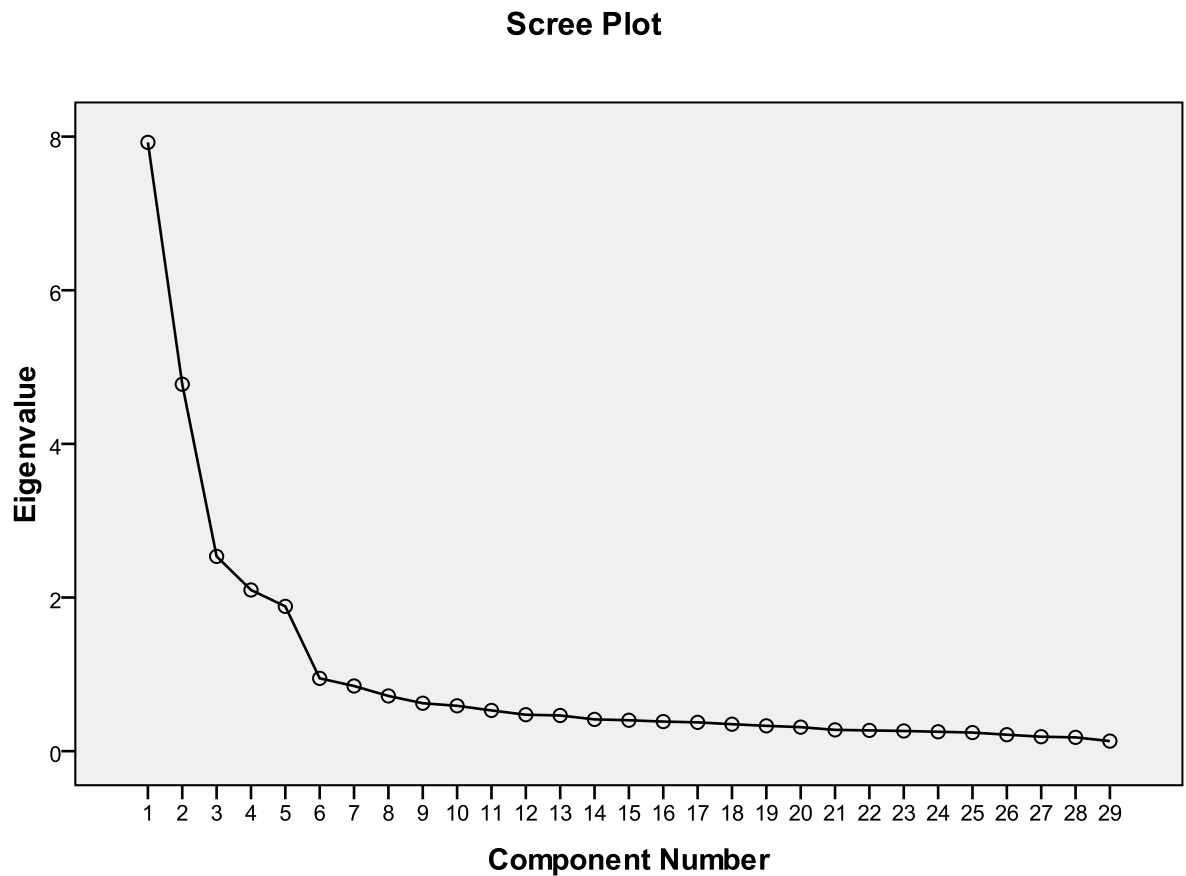
After extracting factors, the criterion applied to determine the number of factors was Scree plot. In the methodology literature, Scree plot is one of the important criteria which can plot the graph for the latent roots. Researchers like Hair et al. (2006, p.120) described that scree plot test is derived by plotting the latent roots against the number of factors in their order of extraction, and the shape of the resulting curve is used to evaluate the cut-off point. The shape of the plot comes in curve that goes negative decreases and is like elbow shape. This shows the eigenvalue is highest for the first factor and moderate but decreasing for the next few factors before reaching small value for the last several factors (Tabachnick and Fidell, 2007, p.644). This changing of plot also showed a clear distinction between factors. This study extracted six factors that have already been confirmed through eigenvalue criterion and factor extraction where eigenvalue criterion like value greater than 1 was found. By applying Scree plot, results showed clear cut off of six factors with the sequence that the first factor have much more of the variance as compared to others (see Graph 5.1).

Graph 5.1: Scree Plot

Scree plot criterion was also used for the second part of the questionnaire with consist of four factors. It describes the criterion of the number of factors. In this part scree, plot test was derived by plotting the latent roots against the number of factors in their order of extraction. This part of the study extracted four factors that have already been confirmed through eigenvalue criterion and factor extraction. By applying Scree plot, results showed the shape of the plot like elbow. This shows the eigenvalue is highest for the first factor and decreasing for the next few factors before reaching small value. Results showed that the clear cut off of four factors with the sequence that first factor have much more of the variance as compared to others (see Graph 5.2).

Graph 5.2: Scree Plot

Third part of the questionnaire consists of five factors where researcher confirmed the variation of items of factors through Scree plot criterion. Scree plot describes the criterion of the number of factors. Here, scree plot test was derived by plotting the latent roots against the number of factors in their order of extraction. This part of the study also extracted five factors that have already been confirmed through eigenvalue criterion and factor extraction. By applying Scree plot, results showed the shape of the plot like elbow. This shows the eigenvalue is highest for the first factor and decreasing for the next few factors before reaching small value. Results showed that the clear cut off of five factors with the sequence that the first factor have much more of the variance as compared to others (see Graph 5.3).

Graph 5.3: Scree Plot

Transformational Leadership: Transformational leadership factor was used to know the effects of leaders to transfer his or her knowledge to individuals. Researcher used the Multifactor Leadership Questionnaire (MLQ) form 5X-Short (Bass and Avolio, 1995). This questionnaire has four dimensions such as idealised influence, inspirational motivation, intellectual stimulation and individual consideration. Each dimension have four questions with five points Likert scale ranging from 1, “not at all,” to 5, “frequently, if not always,” employee indicated how frequently each statement fitted their immediate supervisors. In factor loading results showed that all items were loaded with their respective factors above than the required value .5 (Field, 2006). However in idealised influence two factors were used like idealised attribute and behaviour with four items but both were loaded on three items. Furthermore, factor intellectual stimulation was also loaded on three factors instead of four items.

Intrinsic Motivation: Employee intrinsic motivation was used to know the individuals' motivation from the leaders who transferred knowledge to them. This factor was adapted from the work of Amabile (1985) and used by Teirney et al. (1999). In this variable five items were used with five points Likert scale. Results showed that all items were loaded with the factor above than required value .5.

Psychological Empowerment: This factor is one of the important to know the individual's psychological satisfaction toward the empowerment from the transformational leadership. Four dimensions were used for this factor such that three items of meaning were taken from Tymon (1988) and used by Spreitzer (1995). For competence, three items were adapted for confidence from Jones's (1986). Third dimension is self-determination for that three item were adapted from Hackman and Oldham's (1980) and used by Spreitzer (1995). Finally, Impact were measured by taking three items from Ashforth's (1989) and used by Spreitzer (1995). For all four dimension research used five points Likert scale from very strongly disagree to strongly agree. After factor loading through SPSS version 18 for window, researcher found that all items were loaded with their respective factors above than required value .5.

Perception of Support for Innovation: By adapting 16 items scale developed originally by Seigel and Kaemmerer (1978) and later modified by Scott and Bruce (1994). All items were rated on a five-point Likert scale ranging from 1 (very strongly disagree) to 5 (very strongly agree). After factor loading through SPSS version 18 for window, researcher found that seven items were loaded with the respective factor above than required value .5.

Employee Learning: Employee learning factor was used to understand the learning of employees from transformational leadership. Researcher adapted six item learning orientation scales to the work setting studied here from Elliot and Church's (1997). All items were rated on a five-point Likert scale ranging from 1 (very strongly disagree) to 5 (very strongly agree). Results of factor loaded revealed that five items out of six were loaded with their respective factor above than required value .5.

Workplace Social Relationships: This factor has been used to understand the employees' relationships with the co-workers including leaders. For this factor, four item scales were used to measure social relationships in the workplace. The scale was adapted from the five-

item relationships subscales of Hanpachern's Revised Margin in Life scale (1998), which itself had been modified from the original published survey by Stevenson in 1982. On a five point Likert scale ranging from 1, "Strongly Disagree," to 5, "Strongly Agree." After factor loading through SPSS version 18 for window, researcher found that three items were loaded with the respective factor above than required value .5.

Creativity: Creativity factor was used to measure an individual's ideas towards creativity that might be developed from transformational leadership. Researcher adapted 13 items scale from Zhou and George (1995). Originally three items were adapted from Scott and Bruce (1994), and rest were developed Zhou and George. On a five point Likert scale ranging from 1, "not at all characteristics," to 5, "very characteristics" Results of factor loaded revealed that nine items out of thirteen were loaded with their respective factor above than required value .5.

5.9. Hypotheses Testing

This study investigates the relationship and impact of transformational leadership on followers' creativity and organisational innovation. Researchers proposed to know the relationships and significance between transformational leadership and followers' creativity directory and through mediation of psychological empowerment, intrinsic motivation, support for innovation, workplace relationship and employee learning factors. Furthermore, this study has also been conceptualised to examine the relationship and significance between transformational leadership and organisational innovation and organisational innovation and followers' creativity. To investigate the hypotheses researcher proposed to conduct Pearson's r correlation coefficient to examine the relationships and significance between independent and dependent variables. Researcher also applied extra analysis through hierarchical multiple regression analysis to show the impact of independent variables to the dependent variable. However, analysis was conducted separately for the each hypothesis in order to seek full understanding of the statistical outcomes in relation to the main hypotheses. Researchers also adopted multilevel mediational modelling methods for testing the direct and mediated effects (Krull and MacKinnon, 2001). To assess the mediating effect, Sobel test for multilevel mediational modelling method (Krull and MacKinnon, 2001) was used. However, educational level

and job tenure of the employees were controlled for in all the hierarchical models. By applying beta and t value from Multiple Regression Analysis, hypotheses were tested.

Testing the hypothesis 1 that transformational leadership has positive and significant impact on followers' creativity. From the results of Pearson's r correlation coefficient (see Table 5.26), results showed that there was significant positive correlation between the transformational leadership and followers' creativity ($r = 0.342$; $p < 0.001$). The significant and positive results indicate that the higher the transformational leadership higher the followers' creativity. However, this study applied Hierarchical Multiple Regression Analysis where beta and t value were used for hypotheses testing. Researchers also adopted multilevel mediational modelling methods for testing the direct and mediated effects (Krull and MacKinnon, 2001). To assess the mediating effect, Sobel test for multilevel mediational modelling method (Krull and MacKinnon, 2001) was used. However, educational level and job tenure of the employees were controlled for in all the hierarchical models. The result of the transformational leadership indicated a positive and significant impact on followers' creativity (see Table 5.27) ($\beta = .329$, $p < 0.00$, $t = 7.707$) after controlling for education and working experience. Therefore, findings support for H1, which states that there is a positive relationship between transformational leadership and individual creativity. Furthermore, a significant relationship also satisfies the condition of the mediation tests for all mediator variables.

Table 5.26: Pearson's Correlations

S. No.	Variable	Mean	S. D.	1	2	3	4	5	6	7	8
1	Follower's Creativity	37.3539	4.90325	1							
2	Transformational Leadership	66.5944	9.23479	.324**	1						
3	Intrinsic Motivation	16.3439	2.81130	.223**	.533**	1					
4	Psychological Empowerment	47.2565	6.92992	.404**	.440**	.238**	1				
5	Perception of Support for Innovation	31.7515	5.25977	.268**	.186**	.130**	.321**	1			
6	Employee Learning	20.0497	3.03294	.485**	.254**	.224**	.481**	.380**	1		
7	Workplace Social Relationships	11.9046	2.35471	.216**	.067	-.001	.189**	.118**	.186**	1	
8	Organisational Innovation	10.3598	2.85920	.173**	.190**	.203**	.327**	.341**	.332**	.140**	1

** $p < 0.01$; * $p < 0.05$

Table 5.27: Results of the Regression Analysis for Follower's Creativity

	Step 1	Step 2
Education	.101	.098
Job Tenure	-.004	-.059
Transformational Leadership		.329**
<i>F</i>	2.509	21.667**
<i>Df</i>	2	3
<i>R</i> ²	.010	.115
ΔR^2	.006	.110**

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$

In this study, H2 suggests that the intrinsic motivation mediates the relationship between transformational leadership and followers' creativity. From the results of Pearson's *r* correlation coefficient (see Table 5.26), results showed that there was significant positive correlation between the transformational leadership and intrinsic motivation ($r = 0.533$; $p < 0.001$) and intrinsic motivation and followers' creativity ($r = 0.223$; $p < 0.001$). The significant and positive results indicate that the higher the transformational leadership higher the followers' creativity and higher the intrinsic motivation. Further results showed that transformational leadership has a positive and significant relationships with intrinsic motivation (see Table 5.28) ($\beta = .750$, $p < 0.00$, $t = 24.280$). However, intrinsic motivation negatively relates to creativity ($\beta = -.038$, $p < 0.541$) when entered together with transformational leadership into the equation predicting creativity, where transformational leadership has significant impact ($\beta = .358$, $p < 0.00$). Results of this hypothesis have a partial mediating effect of intrinsic motivation. In this test, Sobel test results showed that the intrinsic motivation does not significantly reduce the effect of transformational leadership on creativity ($t = -.038$, n.s.). Therefore, researcher concludes that the intrinsic motivation does not significantly mediate the relationship between transformational leadership and creativity that do not support H2.

Table 5.28: Results of the Regression Analysis for Follower's Creativity

	Step 1	Step 2	Step 3
Education	.101	.098	.098
Job Tenure	-.004	-.059	-.061
Transformational Leadership		.329**	.358**
Intrinsic Motivation			-.038
<i>F</i>	2.509	21.667**	16.323**
<i>Df</i>	2	3	4
<i>R</i> ²	.010	.115	.116
ΔR^2	.006	.110**	.109**

** $p < 0.01$; * $p < 0.05$

In this study, researcher proposes H3 that psychological empowerment mediates the relationship between transformational leadership and followers' creativity. From the results of Pearson's *r* correlation coefficient (see Table 5.26), results showed that there was significant positive correlation between the transformational leadership and psychological empowerment ($r = 0.440$; $p < 0.001$) and psychological empowerment and followers' creativity ($r = 0.404$; $p < 0.001$). The significant and positive results indicate that the higher the transformational leadership higher the followers' creativity and higher the intrinsic motivation. Results showed that transformational leadership has a positive and significant relationships with psychological empowerment (see Table 5.29) ($\beta = .418$, $p < 0.00$, $t = 10.261$). Furthermore, psychological empowerment positively and significantly relates to creativity ($\beta = .336$, $p < 0.00$) when entered together with transformational leadership into the equation predicting creativity, where transformational leadership has significant impact ($\beta = .188$, $p < 0.00$). Results of this hypothesis have a full mediating effect of psychological empowerment. In this test, Sobel test results showed that the psychological empowerment is significantly increased the effect of transformational leadership on creativity ($t = 7.489$, $p < 0.00$). In conclusion, therefore, psychological empowerment is significantly and positively mediates the relationship between transformational leadership and creativity which support H3.

Table 5.29: Results of the Regression Analysis for Follower's Creativity

	Step 1	Step 2	Step 3
Education	.101	.098	.103
Job Tenure	-.004	-.059	-.100
Transformational Leadership		.329**	.188**
Psychological Empowerment			.336**
<i>F</i>	2.509	21.667**	32.065**
<i>Df</i>	2	3	4
<i>R</i> ²	.010	.115	.205
ΔR^2	.006	.110**	.198**

** $p < 0.01$; * $p < 0.05$

In this study, researcher proposes H4 that perception of support for innovation mediates the relationship between transformational leadership and followers' creativity. From the results of Pearson's *r* correlation coefficient (see Table 5.26), results showed that there was significant positive correlation between the transformational leadership and perception of support for innovation ($r = 0.186$; $p < 0.001$) and perception of support for innovation and followers' creativity ($r = 0.268$; $p < 0.001$). The significant and positive results indicate that the higher the transformational leadership, the higher the followers' creativity and the higher the perception of support for innovation. Results showed that transformational leadership has a positive and significant relationships with perception of support for innovation (see Table 5.30) ($\beta = .210$, $p < 0.00$, $t = 4.765$). Furthermore, perception of support for innovation positively and significantly relates to creativity ($\beta = .223$, $p < 0.00$) when entered together with transformational leadership into the equation predicting creativity, where transformational leadership has significant impact ($\beta = .281$, $p < 0.00$). Results of this hypothesis have a full mediating effect of perception of support for innovation. In this test, Sobel test results showed that the perception of support for innovation significantly increase the effect of transformational leadership on creativity ($t = 5.221$, $p < 0.00$). In conclusion, therefore, perception of support for innovation is significantly and positively mediates the relationship between transformational leadership and creativity that support H4.

Table 5.30: Results of the Regression Analysis for Follower's Creativity

	Step 1	Step 2	Step 3
Education	.101*	.098*	.109**
Job Tenure	-.004	-.059	-.020
Transformational Leadership		.329***	.281***
Perception of Support for Innovation			.223***
<i>F</i>	2.509	21.667***	23.921***
<i>Df</i>	2	3	4
<i>R</i> ²	.010	.115	.161
ΔR^2	.006	.110**	.154**

** $p < 0.01$; * $p < 0.05$

In this study, researcher proposes H5 that employee learning mediates the relationship between transformational leadership and followers' creativity. From the results of Pearson's r correlation coefficient (see Table 5.26), results showed that there was significant positive correlation between the transformational leadership and employee learning ($r = 0.254$; $p < 0.001$) and employee learning and followers' creativity ($r = 0.485$; $p < 0.001$). The significant and positive results indicate that the higher the transformational leadership higher the followers' creativity and higher the employee learning. Results showed that transformational leadership has a positive and significant relationships with employee learning (see Table 5.31) ($\beta = .270$, $p < 0.00$, $t = 6.121$). Furthermore, employee learning positively and significantly relates to creativity ($\beta = .436$, $p < 0.00$) when entered together with transformational leadership into the equation predicting creativity, where transformational leadership has significant impact ($\beta = .214$, $p < 0.00$). Results of this hypothesis have a full mediating effect of employee learning. In this test, Sobel test results showed that employee learning has significantly increased the effect of transformational leadership on creativity ($t = 11.159$, $p < 0.00$). In conclusion, therefore, employee learning is significantly and positively mediates the relationship between transformational leadership and creativity that support H5.

Table 5.31: Results of the Regression Analysis for Follower's Creativity

	Step 1	Step 2	Step 3
Education	.101*	.098*	.119**
Job Tenure	-.004	-.059	-.040
Transformational Leadership		.329***	.214***
Employee Learning			.436***
<i>F</i>	2.509	21.667***	51.402***
<i>Df</i>	2	3	4
<i>R</i> ²	.010	.115	.292
ΔR^2	.006	.110**	.287**

** $p < 0.01$; * $p < 0.05$

In this study, the researcher proposes H6 that workplace social relationships mediate the relationship between transformational leadership and followers' creativity. From the results of Pearson's r correlation coefficient (see Table 5.26), results showed that there was significant positive correlation between the transformational leadership and workplace social relationships ($r = 0.254$; $p < 0.001$) and workplace social relationships and followers' creativity ($r = 0.485$; $p < 0.001$). The significant and positive results indicate that the higher the transformational leadership higher the followers' creativity and higher the workplace social relationships. Results showed that transformational leadership has a positive and significant relationships with workplace social relationships (see Table 5.32) ($\beta = .060$, n.s., $t = 1.311$). Furthermore, employee learning positively and significantly relates to creativity ($\beta = .192$, $p < 0.00$) when entered together with transformational leadership into the equation predicting creativity, where transformational leadership has significant impact ($\beta = .317$, $p < 0.00$). Results of this hypothesis have a full mediating effect of workplace social relationships. In this test, Sobel test results showed that workplace social relationships are greatly increased by the effect of transformational leadership on creativity ($t = 4.642$, $p < 0.00$). In conclusion, therefore, a workplace social relationship is significantly and positively mediates the relationship between transformational leadership and creativity that support H6.

Table 5.32: Results of the Regression Analysis for Follower's Creativity

	Step 1	Step 2	Step 3
Education	.101*	.098*	.090*
Job Tenure	-.004	-.059	-.060
Transformational Leadership		.329***	.317***
Workplace Relationship			.192***
<i>F</i>	2.509	21.667***	22.306***
<i>Df</i>	2	3	4
<i>R</i> ²	.010	.115	.152
ΔR^2	.006	.110**	.145***

** $p < 0.01$; * $p < 0.05$

Hypothesis 7 is associated with the effect of transformational leadership and followers' creativity on organisational innovation. This hypothesis was tested with the control variable (age). From the results of Pearson's r correlation coefficient (see Table 5.26), results showed that there was significant positive correlation between the transformational leadership and organisational innovation ($r = 0.216$; $p < 0.001$). The significant and positive results indicate that the higher the transformational leadership higher the organisational innovation. The result of the transformational leadership indicated a positive and significant effect on organisational innovation (see Table 5.33) ($\beta = .156$, $p < 0.00$, $t = 3.291$). Findings support for H7 which states that there is a positive relationship between transformational leadership and organisational innovation.

Table 5.33: Results of the Regression Analysis for Organisational Innovation

	Step 1	Step 2
Age	.006	-.027
Transformational Leadership		.156***
Followers' Creativity		.123**
<i>F</i>	0.16	6.863***
<i>Df</i>	1	3
<i>R</i> ²	.000	.051
ΔR^2	-.002	.045**

** $p < 0.01$; * $p < 0.05$

Final hypothesis states that there is a positive relationship between followers' creativity and organisational innovation. From the results of Pearson's *r* correlation coefficient (see Table 5.26), results showed that there was significant positive correlation between the followers' creativity and organisational innovation ($r = 0.173$; $p < 0.001$). The significant and positive results indicate that the higher the followers' creativity higher the organisational innovation. Result showed that followers' creativity has a positive and significant impact on organisational innovation (see above Table 5.33) ($\beta = .123$, $p < 0.00$, $t = 2.652$) after controlling age. Therefore, findings supported for H8. Finally, researcher summarised all results of Hierarchical Multiple Regression test in Table 5.34 below.

Table 5.34: Results of Regression Analysis

	Creativity	Intrinsic Motivation	Psychological Empowerment	Perception of support for Innovation	Employee Learning	Workplace Social Relationships
Education	.098					
Job Tenure	-.059					
Trans. Leadership	.329**					
Education		-.118*				
Job Tenure		.046				
Trans. Leadership		.750**				
Education	.098*					
Job Tenure	-.061					
Trans. Leadership	.358**					
Intrin. Motivation	-.038					
Education			.018			
Job Tenure			.105			
Trans. Leadership			.418**			
Education	.103*					
Job Tenure	-.100*					
Trans. Leadership	.188**					
Psychological Emp	.336**					
Education				.121		
Job Tenure				-.286**		
Trans. Leadership				.210**		
Education	.109*					
Job Tenure	-.020					
Trans. Leadership	.281**					
P. S. for Innovation	.223**					
Education					-.091	
Job Tenure					.015	
Trans. Leadership					.270**	
Education	.119*					
Job Tenure	-.040					
Trans. Leadership	.214**					
Employee Learning	.436**					
Education						.058
Job Tenure						-.031
Trans. Leadership						.060
Education	.090*					
Job Tenure	-.060					
Trans. Leadership	.317**					
Workplace So. Re.	.192**					

5.10. Summary

This chapter is concerned with the data analysis in which data were examined from purification to inferring results for testing the proposed hypotheses. According to the proposed methodology and data analysis, initially data was purified through different screening ways like searching missing data and finding outliers. The essence of screening the data was to come up the appropriate results from data for the proper objects. Furthermore, the researcher conducted various statistically tests such that linearity, normality and homoscedasticity to confirm accuracy of data to represent for final results. However, factor loading is one of the important issues to confirm the measurement items lying on relevant variable. Thus factor loading was performed to confirm the measurement item lying on their respective factors. Among the various methods of the extraction researcher proposed to principal component analysis (PCA) which was commonly used to extract the maximum variance from the data set. The researcher used the orthogonal varimax rotational method because of the most commonly variance maximising procedure and has higher generalizability and replicability power compared to the oblique rotational method. By using seventy nine measurement items for fifteen factors results showed all factors loaded with their respective items. However, few items were not loaded which have been deleted. After confirmation of measurement items loading further statistically tests such that reliability and validity were conducted and found positively and significantly correlated. Finally, hypotheses were tested by applying correlation and regression tests. Results showed that all hypotheses were accepted except hypothesis 2 was rejected in which data showed that the intrinsic motivation does not significantly mediate the relationship between transformational leadership and creativity. However, details are given in the following chapter discussion.

CHAPTER SIX: DISCUSSION

6.1. Introduction

The primary aim of this study is to investigate transformational leadership impact on follower's creativity and organisational innovation. The data for this research is collected from the Public Security Sector Institutions of Kingdom of Saudi Arabia. In the previous chapter, detailed information regarding the data analysis including an analysis of the pilot study has been given. The researcher collected large amount of data and empirically tested objects for the direct relations between transformational leadership, follower's creativity, and organisational innovation. Consequently, the researcher also examined the relationship between transformational leadership and followers' creativity through the mediating role of employee psychological empowerment, intrinsic motivation, support for innovation, workplace relationship, and employee learning between transformational leadership and followers' creativity. By applying Hierarchical Regression tests, results showed that transformational leadership has positive and significant relationship with the follower's creativity and organisational innovation. Furthermore, positive and significant relationships were found between followers' creativity and organisational innovation. In addition, the relationship between the transformational leadership and follower's creativity through mediating role of employee psychological empowerment, support for innovation, workplace relationship, and employee learning were found positive and significant. However, data showed that the intrinsic motivation does not significantly mediate the relationship between transformational leadership and creativity. This chapter discusses these findings and the possible justifications for the proposed theoretical framework. The construction of this section is based on an introduction followed by a discussion of the population and sample issues, explaining information about the participants. Next section presents a discussion about measurement scales in which items of the variables were loaded through the factor loading. Before conclusion, discussion of results shows the relationship between transformational leadership and follower's creativity both directly and through mediating factors. This section explains how the mediating factors are affecting the relations between transformational leadership and follower's creativity. Finally, the conclusion of the chapter is presented.

6.2. Population and Sample Issue

The context of this study is Public Security Sector Institutions of Kingdom of Saudi Arabia. These organisations have an important role for delivering services to all public and private institutions. The main reason behind selecting these institutions is examining the causes and consequences of the transformational leadership effects on the followers' creativity and organisational innovation. A little understanding of the relationship between transformational leadership and employees' psychological empowerment, intrinsic motivation, perception of support for innovation, workplace relationship, and organisational learning on follower's creativity and organisational innovation has been found in the culture of Saudi Arabia.

The total population of these institutions was 216320 consisting of different categories of employees such as leaders, supervisors and soldiers. From that population, a probable sampling was done with the consideration of covering all categories of employees from all over the country. Before conducting the main study, a pilot study was first conducted to confirm the reliability and validity of the instrument from the sample of 45 of the employees of the same institutions. After incorporating suggestions received from participants of the pilot study, the main study is conducted to sample of 1000 from the total population. For the main study, which covers the period of four months from August 2012, the researcher used population of those samples of institutions who did not take part for the pilot study. In this regard, large sample of populations was selected due to testing the reliability, correlations and prediction power of factors. According to Powpaka (1998), *selecting a large sample is the requirement for chosen analysis techniques such as confirmatory factor analysis and multi-variances analysis*. Of the 1000 questionnaires distributed, the researcher collected 541 that showed response rate around 54%, which is highly acceptable rate for this type of research. However, research support to a large sample in the form of more than 500 is treated as very good and excellent (Comery and Lee, 1992). In the context of previous literature, many researchers in the relevant domain reported response rate of 20.3 per cent as in Cheng et al. (2006), 10.8 per cent in Laitinen (2002), and 21.8 per cent in Yousafzai (2005). Thus, the response rate of this study can be considered relatively better.

After receiving the data, it was recorded and coded into SPSS 18.0 version software, and then, data was screened as much to reveal what is not apparent, as it is to portray the actual data. Through the screening of data, hidden effects can easily be exposed for the accuracy and set error free objects. This is because of having to get honest results for the outcomes. In this regard, researchers like Hair et al. (2006) and Tabachnick and Fidell (2007) consider the missing of data as a serious issue that may depend upon the pattern of missing data. In the literature, it is reported that 5% of missing data or less than that are less serious, and accordingly, this study, with less than 5%, has got a satisfactory result. However, the researcher found eleven participants involved, which has been removed from the study and after the removal of these missing data out of 541 samples, the remaining samples were included for further investigation. Statisticians considered missing data as one of the important and prior issues because of providing considerable variance, which might be a source of bias.

After the removal of missing data samples, the focus becomes on outliers, which are commonly known as those participants whose score is distinct from the rest of participants. In the data set, outliers are not beneficial or problematic but can bias the mean and inflate the standard deviation (Hair et al., 2006; Field and Hole, 2003). Thus, researchers must behave accordingly to get no effect on statistical inferences. In this study, univariate and multivariate methods were used to find out the outliers. By applying a graphical method, the researcher established nine univariate outliers, which marked with an asterisk. However, for multivariate outliers Mahalanobis D^2 measure was applied to assess each observation. The seven factors of univariate outliers were confirmed, and few extra outliers were also found. All these samples, including in both of total sixteen, have been taken out from the study. Finally, 503 samples were used for inferring the results. Demographic results showed that all respondents are male, and the majority of them are aged between 21 to 30 years old. Further results showed that the majority of the participants are married and, at the educational level, the majority are graduates. However, results of the main study showed majority of them were experience of less than five years and had experience with present employer less than five years. According to sample characteristics results, the majority of participants have less than five employees under supervision who have contact with the direct manager every day. Finally, the majority of the respondents have leadership training for 1-4 weeks.

6.3. Measurement Scale Purification

This study is hypothetico-deductive in which extensive literature is first reviewed, and then a theoretical framework is developed following the gap in the literature. The main purpose of this study is to investigate the relationship and impact of transformational leadership on followers' creativity and organisational innovation both directly and through mediation of psychological empowerment, intrinsic motivation, and support for innovation, workplace relationship, and employee learning factors. Additionally, this study has also been conceptualised to examine the relationship and significance of transformational leadership with organisational innovation and followers' creativity with organisational innovation. Following the aim and approach of the study, hypotheses were developed for the testing. In this regard, a survey instrument was developed based on what information needed and applied. In a survey questionnaire, the choice of options was given in the form of a variety of Likert scale because the reliability of Likert scale tends to be good and greater range of answers permitted to respondent. The survey questionnaire consisted on eight major variables: Demography, Transformational Leadership, Intrinsic Motivation, Psychological Empowerment, and Perception of Support for Innovation, Employee Learning, Workplace Relationship, followers Creativity and Organisational Innovation. Before going for the main study, a pilot study was conducted to confirm the instrument reliability and validity. In this regard, forty-five questionnaires were administered to the participants and result found satisfactory for overall and individual factors, which was more than the required level of reliability scores. However, validity was confirmed through the field experts and got few suggestions, which were incorporated for the main study.

Before going to scale purification, reliability of the instrument was measured because of the demonstrating accuracy of the measurement, procedures, and the ability to repeat the study. According to social science researchers, through reliability the extent to which the research is replicable and the research findings can be repeated in business research (Yen, 1994; Hussey and Hussey, 1997). Researchers have proposed different limit of items of variables, but most likely prefer a lower limit at .7 levels (Robinson et al., 1991; Sekaran, 2000). For this study, highly correlated items with their respective variables have been found through SPSS 18.0 version software with a range from .716 to .891. This shows high internal consistency of the items of variables. However, the reliability of total instrument was in

overall .931. *This shows that the survey instrument has a high level of internal consistency (Field, 2006). Apart from reliability, the instrument validity has importance that is concerned with the extent of findings that represent what is happening (Collis and Hussey 2003).* Through validity, the researcher can establish the phenomena and develop the confidence with which inferences about real life experience and generalizability of certain findings (Reige, 2003). Within this study, the content validity was established through extracting items from the transformational leadership literature through a rigorous review process. Following the literature, experts of the domain who are already familiar were asked to evaluate the measurement items and point out whether the items appeared to be logical valid or not. The researcher found valuable suggestions from the field experts. However, all the items relevant to the constructs were widely accepted in the literature. Therefore, few suggestions were received and incorporated for the final questionnaire.

After demonstrating accuracy and relations of measurement scales, factor-loading tests were conducted to confirm the factor loading of variables with respect to their related items. The questionnaire was adapted from the literature in which a variety of measurement items has been used for their respective factors. However, factor analysis techniques apply for reducing the information and identifying groups or cluster of items of variables, which can be used to understand the structure of a set of variables (Field, 2006; p-619). Hence, exploratory factor analysis techniques were applied to examine the structure of the measurement items. For this test, the principal component analysis, which is most often used to extract the maximum variance from the data set, is selected (Tabachnick and Fidell, 2007). In this method, orthogonal varimax rotational method was used because of the most common variance maximising procedure (Pallant, 2007). Assessing the adequacy of extraction and number of factors, Kaiser-Meyer-Olkin measure, where greater than .6 between the measurement variables relationships has been suggested statistically significant, has been used along with Bartlett's test of Sphericity where researchers recommend the test to be higher than .3 (Tabachnick and Fidell, 2007; Hair et al., 2006).

Three parts of the questionnaire were made because of the large number of the items used. In the first part, 25 items of four factors of transformational leadership and intrinsic motivation variables have been applied. Results showed that all six factors loaded three items were deleted each from idealised attribute, idealised behaviour, and individual

consideration factors. The results showed that KMO value was greater than .6 and Bartlett's test was significant at $p < .005$. All the items were loaded with their respective factors, and KMO value was greater than .6 and Bartlett's test was significant at $p < .005$. Finally, 42 items relating to five factors were used and found five factors with 29 items. The results revealed that KMO value was greater than .6 and Bartlett's test was significant at $p < .005$.

Three other criteria were applied such as latent root criterion, percentage of variance criterion and Scree to assess the adequacy of extracted factors. Here, communality was used to measure the percent of the variance. According to Field (2006, p.630), a variable with no specific variance (or random variance) has a communality of 1, and a variable that shares nothing with all other variables would have a communality of 0. In this study, the researcher following to literature and fixed cut-off point .5. Results found above than .5 communality and range of variation showed from .524 to .774 for the first part of factor loading. In the second part, result showed above than .5 communality and range of variation showed from .718 to .852. Finally, results showed above than .5 communality and range of variation showed from .532 to .819 for the third part. Apart from that, the eigenvalues were used to assess the adequacy of extraction. Researchers confirmed that eigenvalues greater than one satisfies the latent root criterion (Hair et al., 2006). Thus, eigenvalue greater than one is important and is related to the variance. From the first part, all six factors were extracted whose eigenvalue was greater than 1 and all six factors explained 68.74%. In the second part, results showed that all items were loaded with respect to the relevant factor and could not find any cross loading. Results showed that first factor was a high value and then successively smaller values were which explained 79.05%. In the third part, items were loaded with their respective items but few items were not loaded to any factor, which has been deleted. Results showed that all five factors explained 68.74% results, and first factor was a high value and then successively smaller values.

The third criterion for factor loading was Scree plot, which is one of the important criteria, can plot the graph for the latent roots. Researchers like Hair et al. (2006, p.120) described that scree plot test is derived by plotting the latent roots against the number of factors in their order of extraction, and the shape of the resulting curve is used to evaluate the cut-off point. In this study, for the first part, all six factors were extracted through clear cut off of six factors with the sequence that first factor have much more of the variance as

compared to others. The first factor used was transformational leadership with four dimensions such as idealised influence, inspirational motivation, intellectual stimulation, and individual consideration. For these dimensions, four question items were used in which two factors such as inspirational motivation and individual consideration factors were loaded with their original four items. However, idealised influence factor consisted of two factors: idealised attribute and idealised behaviour. Four items for each factor were used, but both were loaded on three original items. Furthermore, factor intellectual stimulation was also loaded on three factors instead of four original items. Another factor employee intrinsic motivation was used to know the individuals' motivation from the leaders who transferred knowledge to them. This factor was established on five items and was loaded with all original items. After that, the researcher applied the psychological empowerment factor, which consisted of four dimensions: meaning, self-determination, confidence, and impact. All these dimensions have three original items and also loaded with their original items. For the perception of support for innovation factor, the researcher adopted sixteen items, which were loaded, and found only seven items loaded with the respective factor. Employee learning factor was used to understand the learning of employees from transformational leadership. Six items were used for this factor and loaded with the original five items. After that, workplace social relationships factor was used. Four item scales were used, and the researcher found that three items were loaded with the respective factor. Finally, the creativity factor was used to measure an individual's ideas towards creativity, which might be developed from transformational leadership. The researcher adapted 13 items scale, but the factor was loaded with only nine original items. All items were loaded with the above value than the required value .5. In this study, the researcher confirmed the items of factors with different cultures and also ensured that the applicability of factors is reliable and valid beyond the original context. Thus, results confirmed theoretically and operationally valid and reliable scales and tested hypotheses these variables.

6.4. Discussion of the Results

The literature review chapter discussed the relationship between transformational leadership and followers' creativity. Additionally, literature also confirmed the relationship between transformational leadership and organisational innovation. However, literature

also witnessed that how important and complex these relations are. Consequently, this study has attempted to go one step further to attempt investigating the relationship of transformational leadership, followers' creativity and organisational innovation. The researcher has empirically tested the relationship between transformational leadership and employee creativity and also organisational innovation and employee creativity for the first time in public security sector institutions of collective culture context.

6.4.1. Transformational Leadership and Followers' Creativity

In line with the above objectives, the theoretical model of this research aimed at investigating the relationship of transformational leadership and followers' creativity through psychological empowerment, intrinsic motivation, and support for innovation, workplace relationship, and employee learning factors. However, the first objective of the research is to examine the relationship between transformational leadership and followers' creativity. With respect to this objective, a large amount of empirical research have been found the positive relationships (Sosik et al., 1998, 1999; Shin and Zhou, 2003; Jung, 2001; Kahai et al., 2003; Jaussi and Dionne, 2003; Gumusluoglu and Ilsev, 2009; Zhang and Bartol, 2010). More recently, researchers have focused on the relationship with negative and positive impact. In this respect, Eisenbeib and Boerner (2013) centred their research on both impacts and empirically showed that transformational leadership promotes followers' creativity but through that dependency of followers in turn reduces their creativity. However, all this research work has been found in the developed world, and negligible studies have been found in the developing countries. Additionally, Bass (1995) supported collectivist societies rather than individual societies for the effect of transformational leadership on followers' creativity. Therefore, this work also looks at this issue from this angle and investigates the role of transformational leadership for followers' creativity in real settings of collective culture.

Data from the research demonstrated a positive and significant effect of transformational leadership on followers' creativity. Therefore, the researcher can affirm that transformational leadership is one of the important variables, which can influence to enhance followers' creativity. In the literature, leadership has been treated as an important influence factor towards the attitudes and behaviours of followers (Mumford and

Gustafson, 1988 and Jung, 2001). However, transformational leadership is different from traditional styles, which have high impact on increasing employees' creativity (Wadman and Bass, 1991 and Garcia-Morales et al., 2008). Many studies showed that transformational leaders empower their followers in respective of cognitive and motivational point of view so as to be innovative (Jung and Sosik, 2002; Jung et al., 2003). Furthermore, the role of transformational leadership is positive and significant because it applies the creativity concept to understanding the existed problems and putting efforts and conventional ideas together to create new approaches to solving problems. The objective of transformational leadership is addressing the underpinnings of creativity that might be an effective means for encouraging creativity. Thus, the results of this study support suggestions by creativity scholars. Specifically, this study supports the literature for developing followers' creativity through transformational leadership behaviour at the collectivist cultures (Jung and Avolio, 1999; Jung and Yammarino, 2001). These results may support public sector organisation.

6.4.1.1. Transformational Leadership and Followers' Creativity through mediating of Psychological Empowerment

The second objective of this study is to investigate the relationship of transformational leadership and followers' creativity through the mediation of psychological empowerment. The literature established that psychological empowerment is a source of creativity because employees who possess empowerment of self-confidence and individualised consideration are more likely to show creative behaviour through personal autonomy, which is part of creative people (Deci et al., 1989; Zhou, 1998; Conger, 1999; Jung et al., 2003; Gumusluoglu and Ilsev 2009). The influence of psychological empowerment has been thoroughly examined in the literature, and researchers have learned a great deal about the effect of psychological empowerment towards the effect of transformational leadership on followers' creativity. With respect to this objective, a large amount of empirical research has been found with positive responses. Shin and Zhou (2003) found a positive role of psychological empowerment on influencing followers' creativity. Jung and Sosik (2002) confirmed that employees who are empowered have higher intrinsic motivation which encourages creative endeavours. In a recent study, Gumusluoglu and Ilsev (2009) examined

the role of psychological empowerment as a mediator factor between transformational leadership and followers' creativity. Results showed positive and significant influence of psychological empowerment for the relationship of transformational leadership on employees' creativity. More recently, Zhang and Bartol (2010) confirmed the influence of psychological empowerment on employees' creativity. Following to the above literature, the researcher has proposed a hypothesis in which he empirically tested the effect of psychological empowerment to influence the relationship between transformational leadership and followers' creativity. The researcher has proposed to examine this impact in the context of a developing country and particularly for public sector institutions.

Results showed significant positive correlation between the transformational leadership and psychological empowerment, and between psychological empowerment and followers' creativity. These results indicated that the higher the transformational leadership higher the followers' creativity and higher the psychological empowerment. Results also confirmed that transformational leadership has positive and significant relationships with psychological empowerment, and psychological empowerment positively and significantly relates to creativity. Finally, results showed that the psychological empowerment is significantly increasing the effect of transformational leadership on creativity. Following the literature, this study supports the importance of the psychological empowerment in mediating the relationship between transformational leadership and followers' creativity (Dvir et al., 2002; Zhou, 1998; Gumusluoglu and Ilsev, 2009; Al-Swidi et al., 2012; Zhou and Xiao, 2012). This study also supports the research by using psychological empowerment as a mediating factor to examine the effect of transformational leadership on followers' creativity. Results of this study do support suggestions by creativity scholars who consider that transformational leadership approaches addressing the underpinnings of creativity may be effective means for intrinsic motivation.

6.4.1.2. Transformational Leadership and Followers' Creativity through mediating of Intrinsic Motivation

The third objective of this study deals with the relationship of transformational leadership and followers' creativity through the mediation of intrinsic motivation. The influence of intrinsic motivation has been thoroughly examined in the literature. Researchers have learned a great deal about the effect of intrinsic motivation towards the relationship between transformational leadership and followers' creativity. With respect to this objective, a large amount of empirical research has been found with mixed responses. Shin and Zhou (2003) found a partial mediating role in influencing followers' creativity by transformational leadership. In a recent study, Gumusluoglu and Ilsev (2009) tested a model at micro, and small sized Turkish software development companies and the mediating role of intrinsic motivation between transformational leadership and followers' creativity was not found significantly. More recent study has centred on the relationship between leadership and creativity through intrinsic motivation (Zhang and Bartol, 2010). Considering the role of intrinsic motivation in facilitating creativity, the researcher has proposed to examine the impact in the context of a developing country and particularly for public sector institutions.

Results of the study showed that there was a significant positive correlation between the transformational leadership, intrinsic motivation and followers' creativity. The significant and positive results indicate that the higher the transformational leadership, the greater the followers' creativity and the intrinsic motivation. Further results showed that transformational leadership has positive and significant relationships with intrinsic motivation. However, intrinsic motivation negatively relates to creativity when entered together with transformational leadership into the equation predicting creativity, where transformational leadership has a significant impact. Results of this hypothesis have a partial mediating effect on intrinsic motivation. Therefore, researchers conclude that the intrinsic motivation does not significantly mediate the relationship between transformational leadership and creativity. From these results, the researcher can confirm the importance of intrinsic motivation influencing the relationship between transformational leadership and followers' creativity. Research supported mixed influence of intrinsic motivation towards creativity like Amabile et al. (1996); Amabile (1983); (199); Jaussi and Dionne (2003) have a positive influence. On the contrary, literature

found partially and no influence of intrinsic motivation those employees might be more flexible (McGraw and Faila, 1982; Shin and Zhou, 2003; Gumusluoglu and Ilsev, 2009). Results of this study contradict the study of Shin and Zhou (2003) but support that of Gumusluoglu and Ilsev (2009). Using intrinsic motivation as a mediating factor to examine the effect of transformational leadership on followers' creativity, results of this study do not support suggestions by creativity scholars who consider that transformational leadership approaches addressing the underpinnings of creativity might be effective means for intrinsic motivation. This study also supports the literature and confirms the results for developing and collectivist cultures of public sector organisation (Jung and Avolio, 1999; Jung and Yammarino, 2001).

6.4.1.3. Transformational Leadership and Followers' Creativity through mediating of Support for Innovation

The fourth objective of this study is to investigate the relationship of transformational leadership and followers' creativity through the mediation of support for innovation. With respect to this objective, the researcher conceptualised innovation as one way of inspirational motivation and intellectual stimulation which can develop useful ideas and idea implementation. The concept of innovation commences when problem is recognised and solves that problem by generating different ideas. This concept has support from creativity literature where innovative ideas have been known as a multistage process where social, cultural and organisational factors involve encouraging the followers' creativity (Mumford and Gustafson, 1988; Scott and Bruce, 1994; Yukl, 2001). According to Gumusluoglu and Ilsev (2009), transformational leaders, by intellectually stimulating their followers, championing innovation, and articulating a compelling vision throughout their organisation, help establish an organisational climate where employees feel challenged and energised to seek innovative approaches in their jobs. In the literature, a considerable amount of empirical research have been found to examine the effect of and found evidence that organisation climate supporting innovation is a significant determinant of individuals' creativity (Jung et al., 2003; Koene et al., 2002; Bain et al., 2001; Gumusluoglu and Ilsev, 2009). Researchers have learned a great deal about the effect of support for innovation towards the relationship between transformational leadership and followers' creativity. With respect to this relationship, literature is available with mixed responses. Basu (1991) and Basu and Green (1997) found strong negative relationships between transformational

leadership and followers' innovative behaviour. However, Howell and Higgins (1990). More recently in an empirical study, researchers like Gumusluoglu and Ilsev (2009) showed a positive effect of transformational leadership on creative behaviour through their influence on the followers' perceptions of a climate supportive of innovation. Based on mixed responses, the researcher looks at this issue and tries to investigate the role of transformational leadership on creative behaviour through their influence on the followers' perceptions of a climate supportive of innovation in real settings of collective culture and particularly for public sector organisations.

For this object, results showed that there was a significant positive correlation between the transformational leadership and perception of support for innovation, and between perception of support for innovation and followers' creativity. The significant and positive results indicate that the higher the transformational leadership, the higher the followers' creativity and the higher the perception of support for innovation. Furthermore, results showed that transformational leadership has positive and significant relationships with perception of support for innovation and perception of support for innovation positively and significantly relates to followers' creativity. The results of the proposed hypothesis showed that the perception of support for innovation significantly and positively mediates the relationship between transformational leadership and followers' creativity. From these results, the researcher affirms the importance of perception of support for innovation influencing the relationship between transformational leadership and followers' creativity. With the mixed responses in the literature, this study supports the literature of collective culture like (Gumusluoglu and Ilsev, 2009), particularly for public sector institutions. However, results of this study support creativity scholars considering that transformational leadership approach addressing the underpinnings of creativity might be effective means for the perception of support for innovation.

6.4.1.4. Transformational Leadership and Followers' Creativity

through mediating of Workplace Relationship

The researcher has suggested a fifth objective to investigate the role of employees' relationships at the workplace for mediating the relationship between transformational leadership and employees' creativity. Literature has suggested that employees in any organisation are like partners in a social and task interaction. A positive relationship shows

in the form of constructive attitudes and behaviours between workers and leaders (Viswesvaran, Sanches, and Fischer, 1999; Tierney and Tepper, 2007). In line with these concepts, interpersonal relationship between leaders and workers constitutes an interconnected social system in an organisation, one that can support for achieving organisational goals. In this respect, Li and Hung (2009) revealed that members in a transformational leadership context interact more often with their leaders and have their leaders' support, confidence, encouragement, and consideration. This has been proved by previous authors like (Wang, Law, Hackett, Wang, and Chen, 2005). However, social aspects regarding the relationships at workplace have been ignored and explored for the first time by Li and Hung (2009). However, in the literature, relationship at the workplace has not yet been examined as a mediatory factor for the effect of transformational leadership on employees' creativity. Considering the role of this relationship on the workplace in facilitating creativity, the researcher has proposed to examine the impact in the context of developing country and particularly for public sector institutions.

In this study, the researcher showed that there was a significant positive correlation between the transformational leadership and workplace social relationships, and between workplace social relationships and followers' creativity. These results indicate that the higher the transformational leadership, the higher the followers' creativity and the higher the workplace social relationships. Results showed that transformational leadership has positive and significant relationships with workplace social relationships. Finally, hypothesis results showed full mediating effect of workplace social relationships between transformational leadership and followers' creativity. Previously, transformational leadership has been tested positively with the followers' attitudes and behaviours (Judge and Piccalo, 2004). In the literature, few studies have been found to examine the transformational leadership as a mediating path that links leadership style to performance (Bass et al., 2003). However, the empirical research on how the co-workers' relationship affects the relations between transformational leadership and followers' creativity is inconsistent and limited. Results of this study found the importance of co-workers' relationships as a mediating factor between transformational leadership and employees' creativity. The findings of this study supported the fact that the effect of transformational leadership on followers' creativity is different through co-workers' relationships at the workplace. It seems the best predictor as found by others in the previous literature. Thus,

from a learning point of view, results of this study support the consideration of creativity scholars that transformational leadership approaches addressing the underpinnings of creativity might be an effective means for co-workers' relationships at the workplace.

6.4.1.5. Transformational Leadership and Followers' Creativity

through mediating of Employee Learning

The sixth objective of this study was to assess the role of employees' learning for influencing the relationship between transformational leadership and employees' creativity. Researchers have linked employees' learning to employees' skills and knowledge in order to progress their approaches and behaviours (Rubin et al., 2005). This is associated with transformational leadership that can support the learning of new skills and knowledge to enhance follower's creativity. Thus, for creativity, learning is essential, and it can be acquired directly by experience of skills or observationally from professional-like leaders. Researchers have well known immense deal about the effect of employee's learning towards the followers' creativity. With this respect, many empirical researchers, like Gong et al. (2009), found in their study that *employees' learning and transformational leadership were positively related to employees' creativity*. In another study, Garcia-Morales et al. (2008) argues that *the lack of knowledge inspires absorptive capacity and transformational leadership also helps to improve absorptive capacity*. In a recent study, Camps and Rodriguez (2011) found a positive connection among employees seeming organisational learning capability and employability awareness and how they perform at within the work millie. Considering the role of learning in the organisation, the above literature witnessed that learning can be promoted through transformational leadership which supports the follower's creativity (Tushman and Nadler, 1986; Garcia-Morales et al., 2008; Weisberg, 1999). However, in the literature, learning has not been examined as a mandatory factor for the effect of transformational leadership on employees' creativity. Considering the role of learning in facilitating creativity, the researcher has proposed to examine the impact in the context of a developing country, particularly for public sector institutions.

For this object, results showed that positive and significant correlation between the transformational leadership and employees' learning, and between employee learning and followers' creativity. These results indicate that the higher the transformational leadership,

the higher the followers' creativity and the higher the employee learning. Results also showed that transformational leadership has positive and significant relationships with employees' learning. Finally, results showed full mediating effect of employees' learning on transformational leadership that can enhance followers' creativity. The results show the importance of employees' learning as a mediating factor between transformational leadership and employees' creativity. These results witnessed the importance of employees' learning which can lend credence to those arguments that urge the learning by experience of skills or observational from professional-like leaders. However, from a learning perspective, results of this study support the creativity scholars' concern that transformational leadership methods addressing the bedrocks of creativity might be an effective means for employee learning.

6.4.2. Transformational Leadership and Organisational Innovation

The second to the last objective of this study is to examine the role of transformational leadership on organisational innovation. According to West and Farr (1990, p-9), innovation is the intentional introduction and application within a role, group or organisation of ideas, processes, products or procedures, new to the relevant unit of adoption, designed significantly to benefit the individual, the group, organisation or wider society. In the literature, organisational innovation has been presented an important factor for successful development of ideas to solve the problems through creative and useful ideas (Amabile et al., 1996; Woodman et al., 1993). There is an increasing interest in transformational leadership for people's motivation to do their best (Bass, 1988, p.33). To this extent, transformational leadership is considered more effective to organisational innovation because they enhance the tendency of organisation to innovate through the new vision and creative ideas (Gumusluoglu and Ilsev, 2009). With this respect, the literature witnessed that transformational leadership has a special influence on innovation (Kanter, 1983; McDonough, 2000; Gumusluoglu and Ilsev, 2009). Other researchers like Geyer and Steyrer (1998); Bass and Avolio (2000); Garcia-Morales et al. (2008); Hsiao and Chang (2011); Noruzy et al. (2013) found a positive relationship between transformational leadership and organisational innovation. Following the literature, a recent study conducted by Gumusluoglu and Ilsev (2009) through personnel managers found a positive association of transformational leadership and organisational innovation. Based on the literature, The

researcher have proposed this objective to examine the impact of transformational leadership on organisational innovation in the context of a developing country, particularly for public sector institutions.

Results of the discussed objective showed a positive and significant impact of transformational leadership on organisational innovation. From these results, the researcher can affirm that organisational innovation has been evolved by transformational leadership that is one of the important variables for employees' creativity. Applying transformational leadership for developing positive attitudes and behaviours to make followers' performance beyond expectation, the leaders used ratings of their followers' innovative abilities. In the literature, transformational leadership has been treated as an important, influential factor towards the organisational innovation (Keller, 1992; Howell and Avolio, 1993; Geyer and Steyrer, 1998; Sosik, et al., 1998; Gumusluoglu and Ilsev, 2009). Researchers used transformational leadership for a promising approach to enhance followers' personal identification and produce a strong emotive attachment to strive fostering organisational innovation (Waldman and Bass, 1991; Kark et al., 2003; Eisenbei and Boerner, 2010). Applying the organisational innovation concept to understand the existing problems and put efforts to creating new approaches to solving problems, the role of transformational leadership is positive and significant. In this study, results support suggestions by organisational innovation scholars with the consideration that transformational leadership methods aimed at the foundations of organisational innovation may t be an efficient means for boosting creativity. Results of this research support the literature for developing organisational innovation through transformational leadership behaviour at the collectivist cultures (Gumusluoglu and Ilsev, 2009).

6.4.3. Followers' Creativity and Organisational Innovation

The last research objective is to examine the relationship between followers' creativity and organisational innovation. To this extent, followers' creativity is used as a creation of new and useful ideas to solve the organisation problems (Oldham and Cummings, 1996; Zhou, 1998). A significant and compelling literature has been considering creativity as to equip the employee for setting goals and solutions of problems created in the organisation (Redmond et al. 1993). To develop organisational culture and climate for the diffusion of learning is a way of employee innovation in the organisation. In the literature, creativity

and innovation have been found crucial for organisational success (Little, 2004; Cho and Pucik, 2005; Dougherty, 2006). Literature witnessed that senior or executive management of a firm influence employees' creativity and organisational innovation (Redmond et al., 1993; Amabile, 1998; Jung et al., 2003). In the literature, Gong et al. (2009) found a constructive and major role of employees' creativity with employees' sales and job performance. In another study, Gumusluoglu and Ilsev (2009) examined the relationship between employees' creativity and organisational innovation, and results showed no significant relationship of employees' creativity with organisational innovation. Researchers have learned a great deal about the effect of employees' learning towards the organisational innovation. With respect to contradictory results, the researcher has proposed to examine the role of employees' creativity to the organisational innovation in the context of developing country, particularly for public sector institutions.

Results of the study demonstrated a affirmative and key correlation between the followers' creativity and organisational innovation. The significant and positive results indicate that the higher the followers' creativity, the higher the organisational innovation. Furthermore, results showed that followers' creativity has a positive and significant impact on organisational innovation. The results show the importance of employees' learning for organisational innovation because innovation is the effective application of creative thoughts within a firm which can be earned from the leaders or experience (Amabile et al., 1996). These results witnessed the importance of employees' creativity as it leads to successful implementation of new programmes, good ideas, introduce new product/services (Mumford et al., 2002). However, from an employee's creative and organisational innovation point of view, results of this study support the creativity scholars who consider that employees' creativity approaches addressing the underpinnings of organisational innovation might be an effective means for organisational goals.

To sum up the above results, this study reveals that transformational leadership has positive and significant impact on followers' creativity. The significance of this result shows that transformational leadership is an influential factor that can help individuals to enhance their skills, knowledge and expertise, thereby attaining the organisational goals. By applying the creativity approach, employees can understand the existed problems and put efforts and conventional ideas together to create new approaches to solving problems. In this research the relationship of transformational leadership and followers' creativity was

tested through the mediation of psychological empowerment, intrinsic motivation, support for innovation, employee learning and workplace relationships. Results support the mediation of all these factors positively and significantly between transformational leadership and followers' creativity except to intrinsic motivation. The significance of these results confirmed that self-confidence, innovative ideas, skills, knowledge, co-workers relationships, and personal autonomy can induce the creative behaviour through the transformational leadership in developing countries in general and particular for Gulf countries like Saudi Arabia. The importance of this study is that transformational leaders are trying to pay attention to their associations often by small power distance, and needs and capabilities basis of individuals. Therefore, the study supports to policy makers for developing leadership qualities into organisation that underpin the creativity among employees. Finally, this study showed a positive and significant effect of transformational leadership, personal identification, strong emotional attachment and followers' creativity on organisational innovation. Thus by applying the organisational innovation concept to understand the existing problems and put efforts to creating new approaches to solving problems, the role of transformational leadership is positive and significant.

6.5. Summary

This study investigated the role of transformational leadership on follower's creativity and organisational innovation directly and with the mediation of employee support for innovation, psychological empowerment, employee learning and workplace relationship factors. A substantial literature review has been conducted, and this research conceptualised that transformational leadership has a progressive impact on follower's creativity and organisational innovation directly and through the mediation of employee support for innovation, psychological empowerment, employee learning and workplace relationship factors. In order to test the theoretical framework, data were collected from public security sector organisations of the Kingdom of Saudi Arabia. Large sample was selected because of the need for selected investigation methods such that factor analysis and multi-variances examination. Receiving data were recorded and coded into SPSS

version 18.0. After cleaning the data, factor loading was done to confirm the items of variables adapted from the literature. Then, reliability and validity were conducted, and various statistical tests used to infer results from the data. Results showed that transformational leadership has a positive and significant relationship with the follower's creativity and organisational innovation. In addition, the connection concerning transformational leadership and employee's creativity was measured and found significant and positive through the mediating factors of employee pursuit for innovation, psychological empowerment, employee learning and workplace relationship. However, data showed that the intrinsic motivation does not considerably reconcile the link between transformational leadership and creativity. Specifically, this study supports the literature for developing followers' creativity through transformational leadership behaviour directly or through the mediation of support for innovation, psychological empowerment, employee learning and workplace relationship at the collectivist cultures. These results may support public sector organisation.

CHAPTER SEVEN

CONCLUSIONS, IMPLICATIONS, LIMITATIONS, RECOMMENDATION, AND FUTURE RESEARCH

7.1. Introduction

In the present changing world, an informative and knowledgeable society requires new leaders who should be creative and innovative to achieve improvements in organisational performance and foster innovation. Organisations sometimes could not achieve the required targets and sustainable competitive advantage because of leaders who can confront a reality based on knowledge, motivation and empowerment. Today, organisational innovation is considered as a sustainable competitive advantage and employees who are creative are better than other competitors and more successful. To this end, transformational leadership plays a very imperative role that influences employees' attitudes and assumptions by creating a collective mentality towards the organisational goals. According to the literature, transformational leader increasingly exercises an extensive influence on employees' performance and understanding of the processes through which he/she exerts this influence (Yulk, 1999). However, researchers sometimes fail to achieve a sustainable competitive advantage and their research remained limited and mostly speculative due to their limited understanding of the relationships between transformational leadership and employees' creativity and organisational innovation. Few studies trace the causal path of the effects of transformational leadership on employees' creativity systematically in both direct and indirect ways (Tierney et al., 1999; Jung et al., 2003; Gumusluoglu and Ilsev, 2009). To this extent, researchers witnessed that the perception of support for innovation and psychological empowerment is the primary source of employees' creativity (Tierney et al., 1999; Gumusluoglu and Ilsev (2009). In addition, transformational leaders empower their followers, organisational performance and develop an innovative climate. However, few researchers systematically examined the relationship between transformational leadership and followers' creativity through the mediating roles of empowerment and innovative climate (Gumusluoglu and Ilsev, 2009) and needed to examine more variables in different cultures. This study extends the relationship through employees' perception of support for innovation, empowerment, intrinsic motivation, organisational learning and workplace

relationship as a way of underlying the effects of transformational leadership on creativity. The researchers proposed to examine these relationships empirically in public security sector organisations of Saudi Arabia, and the literature witnessed that no such context of research has been tested before. The importance of this study is to examine the impact of transformational leadership towards the employees' creativity and organisational innovation directly or through mediation in different cultures like the Arab culture. Apart from that, public security sector organisations of Kingdom of Saudi Arabia are providing services to all public and private institutions. Therefore, there is a need to examine the effects of transformational leadership on followers' creativity and also for a more generalized research framework that systematically investigates the causes and consequences of the transformational leadership.

For this study, data were collected through random sampling. The researcher distributed questionnaires to 1000 samples of employees of public security sector organisations from all over the country, and the response rate was 54.1%. After cleaning the data 503 samples were selected for the main study data analysis. For the main study, data were analysed through Statistical Package for Social Science (SPSS) 18.0 version software. By applying Pearson's correlation coefficient and hierarchical multiple regression analysis, the researcher explained the impact of independent variables to the dependent variable. Results of this study showed that transformational leadership has a positive and significant effect on the follower's resourcefulness and organisational innovation. In addition, the relationship between the transformational leadership and follower's creativeness was measured through the mediating influence of factors like employees' support for innovation, psychological empowerment, employees' learning and workplace relationship. Data revealed positive and significant relationship through these factors except for intrinsic motivation. However, the results of this study supported previous literature and also contribute to the literature by applying employees' learning and workplace relationship for the relationship between transformational leadership and employees' creativity. The next section of this chapter will discuss the research theoretical and methodological implications. This is followed by a discussion of the theoretical and methodological limitations of the research. Finally, recommendations and future research avenues are suggested.

7.2. Contribution of this Thesis

The key contribution that this research study makes is built on the comprehensive theoretical frame which investigates the factors that influence transformational leadership to enhance followers' creativity and organisational innovation in the public sector organisations in Saudi Arabia. This study is an attempt to illustrate to what extent can transformational leadership affect organisational innovation in Saudi Arabia, more precisely, in the public sector and explore how employees' creativity can be improved. This research is beneficial for academics, organisations, and policy makers.

On an academic level, this study contributes to the literature by conducting an empirical research examining the connection of transformational leadership on organisational innovation and followers' creativity. Based on previous researches in this field, this study investigates how transformational leadership can enhance organisational innovation in two ways. First, through a direct link between transformational leadership and innovation, second, through an indirect relationship between them that comes from the connection between follower's creativity and organisational innovation as will be explained later when talking about the theoretical framework. That was the main contribution of this study. This study also was applied to a large scale to give more trustworthiness to the finding.

On a practical level, this study provides guidance to organisations that need to change their leadership styles and approaches, as well as innovation and creativity mechanisms, on a strategic basis. This guidance provides organisations with insight on how they can improve the creativity of their employees through motivating, supporting, and inspiring them. It also provides managers and leaders with leadership approach to enhance the creativity of their followers so the innovation of their organisations.

7.3. Research Implications

7.3.1. Theoretical Implications

Today's organisations need to be innovative can begin through employees' creative ideas. Literature witnessed that organisational innovation has been considered as an important issue due to new technology trends, organisational growth, global economic environment

and better service (Brett and Okumura, 1998; Yukl, 2001). Research supports that creativity is imperative for all innovation. According to Amabile et al. (1996, p.1155), “creativity is the seed of all innovation, and psychological perceptions of innovation (the implementation of people’s ideas) within an organisation are likely to impact the motivation to generate new ideas.” To this extent, the role of leadership is important because the position of leaders is emerging as a new field for developing employee outlook and activities in the firm. In fact, leadership is concerned with the evolving interrelationships continuously evoking motivational responses from followers. The dominant focus of leaders is to control different prospects of followers’ tasks. This can lead to employees’ attitudes and behaviours to obtain the organisation’s goals.

This research is conceptualised through a review of the existing literature in the domain of leadership. The aim of this study is to examine the role of transformational leadership for employees’ creativity and organisational innovation. Indeed, this study addresses the effect of the mediating factors such as employee perception of support for innovation, intrinsic motivation, employee empowerment, employee learning and workplace relationship, to find the followers’ values which support to accept the influence of leaders and followers may be more receptive to the leaders’ influence. Following the literature, Gumusluoglu and Ilsev, (2009) found mixed responses from mediating factors such as motivation, empowerment and innovative in this relationship. Results of this study showed that transformational leadership has a positive and significant impact on organisational innovation and follower’s creativity. From this study, transformational leadership emphasizes the importance of innovation with reference to organisation, and of developing the abilities of the organisation’s members as to be more creative. However, the researcher confirmed the positive and significant relationship between the transformational leadership and follower’s creativity through the mediating factors of employee support for innovation, psychological empowerment, employee learning and workplace relationship.

This study posits that transformational leadership style has influences on followers’ creativity and organisational innovation and knowledge. A significant and compelling result of this study reveals that transformational leadership stimulates knowledge and innovation towards the organisational performance. To this extent, leaders should commit themselves to this style of leadership and undertake self-evaluation of their way of acting.

This is raised as that being a charismatic, inspirational, intellectual stimulation and individualised consideration, transformational leaders should encourage good communication networks and a spirit of trust, enabling transmission and sharing. In the literature, skills and knowledge received from the leadership can enable follower's competence, capability and innovation for the improvement of organisational performance (Nonaka and Takeuchi, 1995; Garcia-Morales et al., 2008).

From the literature, it was noted that transformational leadership influences on the employees' fundamental attitudes, and assumptions can create a common mentality to attain the firm's goals (Garcia-Morales et al., 2008). In this study, the researcher posits that the transformational leadership does not only support increasing organisational innovation, but also can enhance the followers' creativity through their knowledge, skills and experience. This view supports the dynamic capability of transformational leadership that may influence a firm's ability to create and organise the knowledge needed to build organisational learning and innovation. In view of the above idea, the researcher argues that the organisational innovation and followers' creativity can be developed through transformational leadership. A stronger employee support for innovation, psychological empowerment, employee learning and workplace relationship can develop a more positive and significant connection between transformational leadership and employees' creativity and organisational innovation.

Furthermore, the important point of this study is that it represents a significant departure from previous work that has relied on theoretical arguments and practical evidence. Following the literature, this study proposes a theoretical framework for an empirical investigation. In addition, prior research confirmed that the organisational innovation can be done through transformational leadership. The relationship of transformational leadership to organisational innovation has more positive and significant relationship through the mediation of employee support for innovation, psychological empowerment and employee learning. In addition, transformational leadership can influence followers' creativity, and this relationship has a more positive and significant relationship through the mediation of employee support for innovation, psychological empowerment and employee learning (Gumusluoglu and Ilsev, 2009). Despite the need for a more positive and

significant relationship among these factors, little is known about the mediatory role through the workplace relationship and employees' knowledge and skills development.

This research has developed, initially, a comprehensive theoretical framework that investigates the relationship of transformational leadership towards the organisational innovation and followers' creativity directly and through the mediating factors such as employee awareness of maintenance for innovation, intrinsic motivation, employee empowerment, employee learning and workplace relationship. Previous studies have shown links between transformational leadership and organisational innovation through the mediation of employee discernment of provision for innovation, intrinsic motivation and employee empowerment, but the mediating effect of employee learning and workplace relationship were less understood or even explained. There was a growing interest from researchers, policy makers and experts to know about more factors that may play a role in affecting this relationship; therefore, there is a need to investigate more factors. The dominant focus is to examine the role of transformational leadership towards the inspiration of followers' creativity by facilitating other employees of the organisation to discover their rational models for developing a methodical vision of the organisation.

Apart from that, the contribution of this study is the testing of the theoretical framework regarding the impact of transformational leadership on organisational innovation and followers' creativity in a developing country, particularly an Arab country. This study was conducted in public security sector organisations, and no such study was conducted in this context earlier. To this extent, this study has a unique contribution that the theoretical framework was tested for the public sector employees who are working under supervision with different hierarchies. Despite the promising contribution, this study contributes empirically to complement the existing literature, mainly the conceptualisation with reference to transformational leadership on followers' creativity and organisational innovation through the mediating effect of factors. This specific conceptualisation usually affects innovative behaviour positively, and through leadership intellectual stimulation and individualised consideration he/she explores new opportunity, produce dissimilar techniques of discerning, looking for new solutions to difficulties, and embracing generative, probing thought processes. This study has shown that intrinsic motivation, perception of support for innovation; employee empowerment and workplace relationship

are stirring and motivating higher order of needs that prompt creativity. The next contribution of this study is that it was carried out in public security sector organisations where various stakeholders of the organisation with respect to different locations have been covered and less research has been conducted at this level. Another contribution of this study is to the knowledge on how the followers' can be creative and affect organisational innovation in Saudi Arabia. In this literature, many studies have focused on the transformational leadership for various organisations and different cultures. One of the key implications of this research is its confirmation that transformational leadership impacts on the foundation of organisational knowledge in the organisation. Finally, the study was conducted in public security sector organisations in Saudi Arabia, which brings first-hand data from a relatively novel cultural setting. There have been previous research studies in developed nations such as the USA, Canada, Australia and the UK. This is the first study reporting the impact of transformational leadership on organisational innovation and followers' creativity in public security sector organisations in Saudi Arabia. It is significant because it permits a test of the broader soundness of the research study results conducted in other Middle Eastern countries with a similar culture and environment.

7.3.2. Practical Implications

This research has several practical implications for field experts and practitioners. Given the extensive input from the participants of the study, the researcher also believes it is plausible that the findings might have implications for the aspects of transformational leadership. In response to the results of this study, the practical implications are significant for the practicing managers, especially those who are concerned with the human resource functions in an organisation. The followings are practical implication of this study.

First, organisations must have leadership quality where to nurture the growth of transformational leaders. Through the improved managerial quality, leaders must be vigorously involved in nurturing and mentoring employees in the firm. Success and effective leadership must inspire followers to pursue organisational goals and shared vision. Despite that, leaders must talk to followers in their words and encourage them to think in different ways.

Second, the organisation must inspire the application, transformation, gaining and use of new and appropriate understanding and skills. The stream of knowledge and skills may develop the followers' ability and give sense to, understand and utilise considered tacit knowledge to advance the performance of organisation and followers' creativity. To this extent, knowledge of leadership must encourage followers' capacity with reference to organisational goals, and leaders must devote continuous and substantial investment to developing knowledge slack in the organisation. Leaders must accomplish the diverse activities based on supporting organisational goals through followers' absorptive capacity. These actions may encourage more modern organisational structures and policies regarding the better knowledge of followers, and stimulate organisational flexibility towards the innovation and better knowledge transfer.

Third, success and effective leaders should investigate and make learning the dominant component of strategic purpose. From these learnings, he/she might be speaking publicly and eliminate negative group dynamics that might obstruct learning and establishing positive dynamics to inspire collaborative learning. To this extent, strong commitment from the leaders is required to manage and disseminate the learning process at all levels of the firm. Most commonly, it should be assumed that the leader must be capable of guiding the other members of the organisation, a good mentor, innovative and supporting their growth. However, the dominant focus of the leader is that he/she should know how to teach and motivate and how to involve others in common organisational goals.

Fourth, organisational innovation and followers' creativity should be stimulated to drive performance. The idea is that inside and outside the organisation, leader's support for innovation is critical because the leader focuses on creating a context favourable to organisation innovation and followers' creativity. At the heart of leadership, he/she can do much to prepare the minds of their followers to achieve the organisational targets. Indeed, innovation is a collective achievement rather than an individual act, creating a context that legitimates innovative behaviour, adopts the culture as well as structure that sustain the development and implementation of innovation.

Fifth, in any organisation, good performance of individuals is not directly available at all times. However, it might be available only with the appropriate internal characteristics like transformational leadership. Results of this study reveal that the leadership should be

accompanied by equally important concerns about the learning climate. In addition, results confirmed that the development of organisational practices for learning is essential in order to create an atmosphere to improve performance through organisational innovation and followers' creativity. To this extent, every leader in an organisation should take into account extremely practical methods in order to get organisational goals at both individual and collective level.

Sixth, in the organisation, transformational leadership and the factors facilitating learning develop a healthy working atmosphere in an organisation. Apart from that, these factors can increase workers' self-perception of their employability, which can increase higher employee performance, supposedly through organisational innovation. To assess the results of this study, it is extremely interesting to bear in mind fears of organisation of investing in the progress of members of organisation competences when he/she acquired skills may put workers in a better position. However, all employees of the organisation may believe that they need to remain part of the organisation to maintain a job due to current economic dynamics and new competencies in the organisation.

Seventh, in an organisation, managers should provide such a cohesive and binding culture where employees do not feel cognitive or confined in discharging his/her duties. In view of this perception, workers of the organisation should have sufficient scope to express themselves at their workplaces.

Eighth, managers of the organisation should also believe that a transformational leadership would be effective in creating a culture of skills development, and organisational innovation on which performance will enhance HR practices.

Ninth, in an organisation, managers should understand that for an employee who is empowered and motivated to his/her organisation, it is important that his/her knowledge and skill at immediate work settings are valuable to the extent they reduce cognitive and affective dissonance. Most commonly, reduction of cognitive dissonance may be supported to increase workers' job involvement and level of performance and reduced intention to quit.

Tenth, in Arab culture, management is currently in a dynamic state, and this study underlines the fact that leaders should attempt to maintain the worker's knowledge and skills, self-respect, social relationship, support for innovation and dignity.

Eleventh, the management of Arab culture organisation requires that transformational leaders look for employee motivation for organisational innovation and learning. In this context, this study offers a starting point for human resources practitioners for public sector Arabic organisations in the sense that it highlights some effective ways they need to develop and practice towards an enhanced performance of their subordinates.

Furthermore, regarding organisational innovation, results of the study show that organisations depend upon employees and should facilitate employees' creativity by enhancing managers' transformational leadership style. To the knowledge of authors, previous research work revealed that transformational leadership can be developed in focused training programmes (Barling et al., 1996; Dvir et al., 2002). Hence, organisations in an Arabic culture should emphasize on followers' creativity and innovation through transformational leadership because of knowing how to encourage effectively, motivate and intellectually stimulate their followers. Results of this study indicate that transformational leadership may raise followers' creativity and reduce the dependency on the leader. From a support for innovation and motivational perspective, transformational leadership thus seems to be imperative for the followers' personal development.

Finally, the workplace of Arabic organisations is an extension of the social, cultural, and religious network for employees whereby significant decisions are influenced more by interpersonal relationship than by task requirements. To this end, this study has offered the necessary indicators for effective transformational leadership intervention for Arabic practitioners.

7.3.3. Methodological Implications

In addition to the theoretical and practical implications, this study also has methodological contributions. It is for the first time such a framework included workplace relationship and employee learning along with other factors such as empowerment, intrinsic motivation, and support for innovation, to be investigated as mediatory factors for the relationship between transformational leadership, followers' creativity and organisational innovation. Prior

research on this model has not been tested in public sector organisations. This was a methodological limitation which affects the crux of this study.

Apart of that, it is the first time that such a study is applied to examine the followers' creativity and organisational innovation through transformational leadership outside Western culture, specifically in Saudi Arabia. Earlier, many empirical and conceptual studies have been conducted on transformational leadership to measure the impact on innovation and employee creativity, such as Amabile et al. (1996); Bass (1998; 1999); Mumford et al. (2002); Gracia- Morales et al. (2008); Gumusluoglu and Ilsev (2009). However, all these studies have been conducted in Western cultural settings or developed countries. To this extent, the researcher has filled the gap with reference to global investigations by examining predictor variables in a new cultural context, which might be useful for generalising these predictors.

From the measurement scales point of view, this research has confirmed the prevailing measurement gauges in an Arabic nation that is traditionally dissimilar from developed and Western culture. In this study, all the scales used for the purpose appeared valid in their general content. However, few items from the original were deleted in the purified scales. For instance, after testing the idealised attribute, idealised behaviour and intellectual stimulation with four items, they were purified into three original items. Similarly, perception of support for innovation factors consisted of sixteen items and purified into seven original items above than the required value of .5. Another factor like employee learning was adapted by six items but initially loaded with five items. The factor of creativity was initially loaded with nine items out of thirteen. From these factors, forthcoming cross-national studies could benefit from additional examination into the important circumstances in which the comparability of scales across nations can be re-configured .

The cultural background of people of the Kingdom of Saudi Arabia is entirely different from that of Western people; therefore testing the impact of transformational leadership in this research may provide additional insights into the existing literature. However, results of this study suggest that transformational leadership has a positive and significant impact on followers' creativity and organisational innovation in a similar way across both Western and non-Western cultures. From these results, it could be assumed that people in Saudi

Arabia have similar beliefs to those reported in the literature regarding the overall concept, but they are focussed on upcoming requirements and opportunities. Furthermore, the data from the research indicate that workplace relationships and employee knowledge and skills development have a positive impact on organisational innovation and creativity through transformational leadership.

7.4. Research Limitation

This study was applied to the public sector organisation in Saudi Arabia. Thus, it is limited in terms of its scope. This study is limited to a specific country and sector. Hence, its findings cannot be generalised to other industries or countries. Moreover, this study used survey method to collect the primary data. Thus, it presumes that participants' answers to the questions are truthful and represents their actual approach and conduct. What is more, examining employees' creativity and transformational leadership only in one sector of public institutions may limit the extent to which the study can be generalised

7.4.1. Theoretical Limitations

Results of the study are promising, useful and encouraging. However, this research has few limitations that can be noted and overcome in future research. This study was proposed to investigate the role of transformational leadership for organisational innovation and followers' creativity, which may limit its generalisability. To this extent, the results are offered specifically to the employees of public sector organisations, which means that employees who do not belong to that kind of organisation may have different responses and may react differently.

In view of previous studies, this study has conceptualised and addressed some factors based on organisational competency approaches, but not culturally, socially and religiously influenced factors that might be interesting to study empirically in the future because of the unique environment of the Kingdom of Saudi Arabia. With this reference, the important and potential point for Arab employees may attract some social and workplace factors; therefore, this study has some limitations and future researchers should consider how such variables affect individuals' learning and organisational innovation. This stream of factors should be tested in a larger sample of other organisations, which might be a further support

to the value of transformational leadership. In the light of such new theoretical framework and large sample of employees, it might be a step to strengthen this study's generalisability.

Another limitation of this study is the results obtained from its empirical unique datasets approach where selected samples have been used. The researcher applied the theoretical framework to a unique institution in the Kingdom of Saudi Arabia, which might be a factor that restricted the results. However, the researcher was facing difficulty in obtaining information from all over the country. The researcher proposes that future studies could be conducted in other institutions where transformational leadership has existed in order to be able to generalise the results of the study.

Applying the framework with limited choice for selecting variables and data collection is another limitation. The researcher proposes selecting more meaningful variables for future study, where he acknowledges other social, cultural, religious, and political factors that could have more influence on followers' creativity and organisational innovation. The new combination of these factors along with the existing factors may provide more potential and practical results in examining the role of transformational leadership. In addition, a single source of data is another (Crampton and Wagner, 1994). The researcher of this study proposed to have in-depth interviews from the sample to confirm the results obtained from the quantitative sources.

The researcher has developed a theoretical framework without applying any theory, which was a limitation of this study. This raises the issue of theory applied in the literature to understand the role of transformational leadership. However, there might be relevant theories that can be used to examine the role of transformational leadership towards the organisational innovation. Thus, there is a need to take theories into consideration to develop a theoretical model to examine the factors related to the role of transformational leadership for followers' creativity. In addition, the results of this study refer only to the Saudi Arabia cultural context, especially that of the Kingdom of Saudi Arabia where public sector organisational practices might be different from those in developed and Western cultures. To a large extent, the conceptualisation of this study was based on the literature of Western and other cultures. This might be raising issues, and thus, the results should be compared to those from other countries with the same concept to provide more generalisability.

7.4.2. Methodological Limitations

The results of this research acknowledge the need for the development of transformational leadership behaviours at all levels. However, this study contains some methodological limitations, which might be related to the research design, measurement scales and samples. To this context, a major limitation is the research design, which does not allow a complete examination of the role of transformational leadership for followers' creativity and organisational innovation. Concerning the research design, this research has another limitation such that the data for this study was collected one time not a longitudinal. Therefore, there should be a longitudinal research instead of cross-sectional study. Furthermore, this research has adapted measurements of scale from the literature through which the impact of transformational leadership has been tested for the organisational innovation and followers' creativity through the mediation of support of innovation, intrinsic motivation, empowerment, workplace relationship and employee creativity. This research has not widely tested these scales for their validity and reliability across cultures. Therefore, these scales should be confirmed across cultures and used for the study. There is another limitation with reference to the sampling due to the selection of public sector security organisations of an Arab country. The selection of the institutions may have been biased because other public sector organisations were not selected. In Addition, the selection of the sample was limited because it was not drawn from all over the country. Apart from that, the context of research was only public sector security organisations from the Kingdom of Saudi Arabia, which is a limitation due to different environments, cultures, religions and social environments for its generalisability. Indeed, this research has context issues regarding the voluntary participation which could have been influenced by the environmental factors. The research design was based on a single source of data for this study. In this connection, the researcher used a survey questionnaire to collect the data from the employees of public sector security organisation. Recent research like Park and Ki (2009) revealed that self-administered survey questionnaire may have a high correlation among the variables because the facts share common method variance. Thus, self-administered survey might be affected by common method bias, leading to dependability and validity challenges. Apart of that, the survey questionnaires were completed by staff from a single sector organisation, and this may limit external validity.

7.5. Recommendations and Future Research Avenue

The results of this study highlight the need for the development of transformational leadership behaviours. The researcher posited that following recommendations might be implemented and considered by field experts, practitioners and concerned parties in the context of developing followers' creativity and organisational innovation in general and particularly for the Arab culture context.

First, more comprehensive theoretical framework should be developed which considers important factors such as shared vision, system thinking, personal mastery and learning.

Second, the researcher proposed to investigate the role of transformational leadership for organisational innovation and followers' creativity in the public sector security organisation of the Kingdom of Saudi Arabia. The researcher recommends testing this theoretical framework in other than the public sector security organisation for confirming the generalisability of this research. To this extent, there is the possibility that the employees who do not belong to that organisation might have different responses and may react differently.

Third, this research did not consider the cultural, social and religious influenced factors which are important for the Arabic culture. It should be interesting to investigate different factors relating to workplace, such as environmental, cultural, social and religious factors, which may be interesting in the future because of the unique environment of the Kingdom of Saudi Arabia.

Fourth, the researcher has applied the framework with limited choice for selecting variables and data collection, and thus, he proposes in terms of selecting meaningful variables for future studies. The new combination of the research framework should be considering new factors based on the current situation along with the existing ones which might provide more potential and effective results in examining the role of transformational leadership.

Fifth, this research was conceptualised on the basis of previous literature in which theory was not applied so far. This might be raising the issue of theory, and in the future the researcher recommends using appropriate theories for a new conceptualisation. However,

there might be relevant theories that can be used to examine the role of transformational leadership towards the organisational innovation and followers' creativity. Thus, there is a need to take theories into consideration to develop a theoretical model to examine the factors related to the role of transformational leadership for followers' creativity.

Sixth, the researcher proposed to examine the framework in another Arabian country other than the Kingdom of Saudi Arabia where the results might be different. In addition, the proposed research framework should be tested in private organisations rather than public sector organisations.

Seventh, this research was conceptualised based on the literature of Western and other developed cultures. The researcher proposed to consider the factors that are more useful in the Arabian culture.

Eighth, a single source of data is one of the important issues in this study. There should be more than a single data, and for future research, the researcher recommended conducting in-depth interviews from the sample to confirm the results obtained from the quantitative sources.

Ninth, a sample from a unique organisation is a problematic one, and there should be a combination of datasets from other than the public sector security organisation to confirm the role of transformational leadership for organisational innovation.

Tenth, data was not obtained from all over the country, and hence, it could not be generalised for the country. To this extent, the researcher recommended conducting a study which covers all over the country, which may give different results and may support the existing results in order to be able to generalise the results of the study.

Eleventh, the researcher recommended conducting a longitudinal research instead of a cross-sectional study that might give different results for the investigation of the impact of transformational leadership for followers' creativity and organisational innovation.

Twelfth, the measurement of scales from the Western literature has been adapted for this study that might be problematic in widely testing these scales for their validity and

reliability across cultures. Therefore, these scales should be confirmed across cultures and used for the study.

Thirteenth, the selection of the sample and research context regarding the voluntary participation and the given choice of completing the questionnaire anywhere are issues for this study. In future research, there should be a consideration for the environmental, social, cultural and religious factors that might be affecting the human behaviour.

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Appendix 1: Survey Questionnaire in English Language**Survey Questionnaire**

(N.B How much time did you take to complete this questionnaire minutes)

1. Background Details

(please click the relevant box)

1. Gender Male Female
2. Age Less than 21 21-30 31-40
 41-50 51 – 60 above 60
3. Social Status Single Married Divorced/Widow
4. Level of Degree Undergraduate Graduate Postgraduate
5. Your job position please-----
6. Full experience Less than 5 years 5-10 years 10-15 years
 15-20 years More than 20 years
7. Experience in present employer Less than 5 years 5-10 years
 10-15 years
 15-20 years More than 20 years
8. Years with supervisory position Less than 5 years 5-10 years
 10-15 years
 15-20 years More than 20 years
9. Number of Subordinates Less than 5 5-10
 10-15
 15-20 More than 20
10. How often during the week do you have contact with your direct manager
 Never Rarely
 Occasionally
 Very Often Every day
11. Leadership Training 1-4 weeks 4-8 weeks
 8-12 weeks
 More than 12 weeks

2. Transformational Leadership

Please click on the scale below to what extent you like with each of the following statement about the Transformational leadership: (1 = Not at all, 2 = Once in a while, 3 = Sometimes, 4 = Fairly often, 5 =Frequently if not always).

Idealised Influence

Idealised Attributes

	←	↔	→		
	Not at all			frequently if not always	
	1	2	3	4	5
1. Instil pride in others for being associated with me	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.Go beyond self-interest for the good of the group	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.Act in ways that build others’ respect for me	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.Display a sense of power and confidence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Idealised Behaviour

5.Talk about my most important values and beliefs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.Specify the importance of having a strong sense of purpose	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.Consider the moral and ethical consequences of Decisions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.Emphasise the importance of having a collective sense of mission	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Inspirational Motivation

9.Talk optimistically about the future	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.Talk enthusiastically about what needs to be Accomplished	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11.Articulate a compelling vision of the future	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12.Express confidence that goals will be achieved	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Intellectual Stimulation

13. Re-examine critical assumptions to questions whether they are appropriate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
---	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

←	↔	→		
Not at all			frequently if not always	
1	2	3	4	5

14. Seek differing perspectives when solving problems
15. Get others to look at problems from many different angles
16. Suggest new ways of looking at how to complete assignments

Individual Consideration

17. Spend time teaching and coaching
18. Treat other to look at problems from many different angles
19. Consider each individual as having different needs, abilities and aspirations from others
20. Help others to develop their strengths

3. Intrinsic Motivation

Please indicate on the scale below to what extent you agree with each of the following statement the intrinsic motivation (1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree).

Very Strongly Disagree ←————→ Very Strongly Agree

21. I enjoy finding solutions to complex problems
22. I enjoy coming up with new ideas for production
23. I enjoy engaging in analytical thinking
24. I enjoy creating new procedures for work tasks
25. I enjoy improving existing processes or products

4. Psychological Empowerment

Please indicate on the scale below to what extent you agree with each of the following statement about psychological empowerment (1 = Very Strongly Disagree, 2 = Strongly Disagree, 3 = Neutral, 4 = Strongly Agree, 5 = Very Strongly Agree).

Very Strongly Disagree ←————→ Very Strongly Agree

Meaning

26. The work I do is very important to me
27. My job activities are personally meaningful to me
28. The work I do is meaningful to me

Competence

29. I am confident about my ability to do my job
30. I am self assured about my capabilities to perform my work activities.
31. I have mastered the skills necessary for my job

Self-Determination

32. I have significant autonomy in determining how I do my Job
33. I can decide on my own to go about doing my work
34. I have considerable opportunity for independence and freedom to how I do my job.

Impact

35. My impact on what happens in my department is large
36. I have a great deal of control over what happens in my department
37. I have significant influence over what happens in my department

5. Perception of Support for Innovation

Please indicate on the scale below to what extent you agree with each of the following statement about the support for innovation (1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree).

	Strongly Disagree	←————→			Strongly Agree
38. Creativity is encouraged here	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
39. Our ability to function creatively is respected by the leadership	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
40. Around here, people are allowed to try to solve the same problems in different ways	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
41. The main function of members in this organisation is to follow orders which come down through	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
42. Around here, a person can get in a lot of trouble by being different	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
43. This organisation can be described as flexible and continually adapting to change	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
44. A person cannot do things that are too different around here without provoking anger	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
45. The best way to get along in this organisation is to think the way the rest of the group does	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
46. People around here are expected to deal with problems in the same way	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
47. This organisation is open and responsive to change	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
48. The people in charge around here usually got credit for others ideas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
49. In this organisation, we trend to stick to tried and true ways	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
50. I have mastered the skills necessary for my job	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
51. This place seems to be more concerned with the status quo thanwith change	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

52. This organisation publicly recognise those who are innovative
53. The reward system have benefits mainly those who don't rock the boat

6. Employee Learning

Please indicate on the scale below to what extent you agree with each of the following statement about the employee learning (1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree).

- Strongly Disagree ←————→ Strongly Agree
54. I want to learn as much as possible from this organisation.
55. It is important to me to understand the content of this organisation as thoroughly as possible.
56. I hope to have gained a broader and deeper knowledge of psychology when I am done with this organisation.
57. I desire to complete master the material presented in this class.
58. In an organisation, I prefer material that arouse my curiosity, even if it is difficult to learn.
59. In a organisation, I prefer material that really challenges me so I can learn new things.

7. Workplace Social Relationships

Please indicate on the scale below to what extent you agree with each of the following statement aboutthe workplace social relationships (1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 =Strongly Agree).

- Strongly Disagree ←————→ Strongly Agree
60. My interpersonal relationship with my workers are excellent.
61. Working with others is difficult,
62. My relationship to the leaders in my organisation is very positive
63. The people I have met at my job are great.

8. Creativity

Please indicate on the scale below to what extent you agree with each of the following statement about the creativity (1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree).

	Strongly Disagree	←————→			Strongly Agree
64. Creativity suggests new ways to achieve goals or objectives	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
65. Creativity comes up with new and practical ideas to improve performance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
66. Creativity searches out new technologies, processes, techniques, and/or product ideas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
67. Creativity suggests new ways to increase quality	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
68. Creativity is a good source of creative ideas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
69. Creativity is not afraid to take risks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
70. Creativity promotes and champions ideas to others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
71. Creativity exhibits creativity on the job when given the opportunity to	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
72. Creativity develops adequate plans and schedules for the implementation of new ideas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
73. Creativity often has new and innovative ideas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
74. Creativity comes up with creative solutions to problem	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
75. Creativity often has a fresh approach to problem	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
76. Creativity suggests new ways of performing work tasks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

9. Organisational Innovation

77. The rate of introduction of new services in the organisation has grown rapidly.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
78. The rate of introduction of new services rendered in the organisation has grown rapidly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
79. In comparison to its competitors, the organisation has become much more innovative.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(Thank You)

Appendix 2: Survey Questionnaire in Arabic Language

بسم الله الرحمن الرحيم

المملكة المتحدة

جامعة برونييل

كلية ادره الاعمال

تأثير القيادة التحويلية على ابداع العاملين و الابداع التنظيمي في القطاع العام
دراسة تحليلية لقطاع الامن العام في المملكة العربية السعودية

إعداد الطالب

سعود بن محمد العريفي

٢٠١٢ م

بسم الله الرحمن الرحيم

الزميل العزيز:

السلام عليكم ورحمة الله وبركاته

بطيه استبيان لدراسة بعنوان (تأثير القيادة التحويلية على ابداع العاملين و الابداع التنظيمي في القطاع العام) التي يتم إعدادها لنيل درجة الدكتوراه في الإدارة العامة من كلية ادارة الاعمال في جامعة برونيل في لندن بالمملكة المتحدة.

آمل تكرمك بالإجابة على أسئلة هذه الاستبيان بموضوعية، علما بأن الاستبيان المرفق يعد أداة للبحث العلمي و لن تستخدم بياناته الا لأغراض البحث العلمي فقط.

شاكرا لكم حسن تعاونكم

و لكم تحياتي.

الباحث:

سعود بن محمد العريفي.

أولا : البيانات الشخصية :

اختر الإجابة المناسبة في الأسئلة التالية :

- (١) الجنس: ذكر أنثى
- (٢) العمر: أقل من (٢١) سنة .
 من (٢١) الى (٣٠) سنة .
 من (٣١) الى (٤٠) سنة .
 من (٤١) الى (٥٠) سنة .
 من (٥١) الى (٦٠) سنة .
 أكثر من (٦٠) سنة .
- (٣) الحالة الإجتماعية: أعزب متزوج أرمل أو مطلق
- (٤) المؤهل العلمي: ثانوية وما يعادلها فأقل. بكالوريوس جامعي. تعليم عالي
- (٥) عدد سنوات الخبرة : أقل من (٥) سنوات .
 من (٥) الى أقل من (١٠) سنوات .
 من (١٠) الى أقل من (١٥) سنوات .
 من (١٥) الى أقل من (٢٠) سنوات .
 (٢٠) سنة فأكثر .
- (٦) عدد سنوات الخبرة في عملك الحالي: أقل من (٥) سنوات .
 من (٥) الى أقل من (١٠) سنوات .
 من (١٠) الى أقل من (١٥) سنوات .
 من (١٥) الى أقل من (٢٠) سنوات .
 (٢٠) سنة فأكثر .
- (٧) عدد سنوات عملك الإشرافي: أقل من (٥) سنوات .
 من (٥) الى أقل من (١٠) سنوات .
 من (١٠) الى أقل من (١٥) سنوات .
 من (١٥) الى أقل من (٢٠) سنوات .
 (٢٠) سنة فأكثر .

- ٨) عدد المرؤوسين تحت إدارتك:
- أقل من (٥). ٥ - ١٠ مرؤوس.
- ١١ - ١٥ مرؤوس. ١٦ - ٢٠ مرؤوس.
- أكثر من ٢٠ مرؤوس.
- ٩) كم مره في الاسبوع تقابل رئيسك في العمل:
- لا أقابله إطلاقاً. نادراً ما أقابله.
- في المناسبات. غالباً أقابله.
- أقابله يومياً.
- ١٠) برامج التدريب على القيادة:
- (١ - ٤) أسابيع. (٥-٨) أسابيع.
- (٩-١٢) أسابيع. أكثر من ١٢ اسبوع.

ثانيا : آراء عينة الدراسة في تأثير القيادة التحويلية على ابداع العاملين: الرجاء اختيار عبارته واحده من العبارات المعبرة عن رأيك في العبارات التالية

المحور	م	العبارة	أبدا	نادرا	أحيانا	غالبا	دائما
القيادة التحويلية		المثاليه					
	١	أعرس الفخر في الآخرين لارتباطهم بي.					
	٢	أتجاوز المصالح الذاتيه من أجل صالح الجماعه					
	٣	أتصرف بطرق لكسب احترام الآخرين لي					
	٤	أظهر الشعور بالقوة والثقه.					
	٥	أتحدث عن أهم معتقداتي و قيمتي .					
	٦	أحدد أهمية وجود أو إمتلاك شعور قوي للعمل.					
	٧	أراعي العواقب الاخلاقية والمعنوية للقرارات.					
	٨	التأكيد على أهمية وجود شعور جماعي للمهمة.					
			الدافعه الإلهاميه				
	٩	أتحدث بتفاؤل عن المستقبل.					
	١٠	أتحدث بحماس عن مايجب انجازه.					
	١١	أقدم رؤية مقنعه للمستقبل.					
	١٢	أظهر الثقة بأن الاهداف ستتحقق.					
			الحفز الفكري				
	١٣	أعيد مراجعة الافتراضات الحاسمه للتأكد من مناسبتها.					
	١٤	أطلب وجهات نظر مختلفه عند حل المشاكل					
	١٥	اجعل الآخرين ينظرون الى المشاكل من زوايا مختلفه					
	١٦	أقترح طرق جديدة للنظر في كيفية اكمال المهام					
			الإهتمام الفردي				
١٧	أقضي وقتا لأعلم وأدرب.						
١٨	أدرب العاملين على النظر للمشاكل من زوايا مختلفه.						
١٩	أنظر لكل فرد بانه يملك قدرات وطموحات مختلفه عن الآخرين						
٢٠	أساعد الآخرين على تطوير قدراتهم						

المحور	م	العبارة	غير موافق بشدة	غير موافق	محايد	موافق	موافق بشدة
الحوافز الداخلية	٢١	أستمتع بايجاد الحلول للمشاكل المعقدة					
	٢٢	أستمتع بايجاد أفكار جديدة للمنتجات					
	٢٣	أستمتع بالمشاركة في الأفكار التحليلية					
	٢٤	أستمتع بايجاد اجراءات جديدة لمهام العمل					
	٢٥	أستمتع بتطوير العمليات والمنتجات القائمة					
التمكين	المعنى						
	٢٦	العمل الذي اوديه مهم جدا بالنسبة لي					
	٢٧	مهام عملي مهمة شخصيا لي					
	٢٨	العمل الذي اوديه مهم لي					
	المنافسة						
	٢٩	انا واثق من قدراتي على أداء عملي					
	٣٠	انا متأكد من امكانياتي للقيام بمهام عملي					
	٣١	انا أتقن المهارات الأساسية لأداء عملي					
	حرية الاراده						
	٣٢	لدي مجال واسع في إختيار كيفية قيامي بمهام عملي					
	٣٣	انا أقرر بنفسي كيفية قيامي بعملي					
	٣٤	أملك الإستقلالية و الحرية بكيفية قيامي					
	التأثير						
٣٥	تأثيري في ما يحدث في ادارتي كبير						
٣٦	لدي القدرة في السيطرة على ما يحدث داخل						
٣٧	لدي تأثير مهم على ما يحدث في ادارتي						

المحور	م	العبارة	غير موافق بشدة	غير موافق	محايد	موافق	موافق بشدة
المناخ المساعد على الابداع	٣٨	الابداع مشجّع في هذه المنظمه					
	٣٩	قدراتنا للعمل بابداع مقدرة من القيادة					
	٤٠	يسمح للعاملين في المنظمة بالمحاولة لحل نفس المشكلة بطرق مختلفه					
	٤١	المهمة الاساسية للعاملين هي تلقي الاوامر التي تأتي من الادارة العليا					
	٤٢	في المنظمة الشخص ممكن ان يقع في مشاكل اذا عمل بطريقة مختلفه					
	٤٣	هذه المنظمة يمكن ان توصف بأنها مرنة وتتكيف مع التغيير					
	٤٤	الشخص لايمكن أن يعمل بطرق مختلفة في هذه المنظمة من دون إثارة الغضب.					
	٤٥	الطريقة المثلى للعمل في المنظمة هي التفكير كما يفكرون الجماعه					
	٤٦	يتوقع من الناس ان يتعاملون مع المشاكل بنفس الطريقة.					
	٤٧	المنظمة مفتوحة وتستجيب للتغيير.					
	٤٨	المسؤولين عادة ينسبون افكار الغير لهم.					
	٤٩	في منظمنا نتمسك بطرق مجريه وحقيقه.					
	٥٠	أتقن المهارات الأساسية لأداء عملي					
	٥١	هذا المكان يركز على الوضع الراهن أكثر					
	٥٢	هذه المنظمة تعترف علنا بالمبدعين.					

					يستفيد من نظام المكافآت أشخاص لا يستحقون المكافأة	٥٣	
					أريد ان اتعلم بقدر الامكان من هذه	٥٤	التعليم التنظيمي
					من المهم ان أفهم محتوى المنظمة بشكل جيد.	٥٥	
					أمل ان اكون أكتسبت معرفة أوسع وأعمق من الناحية النفسية عندما أنهى عملي مع	٥٦	
					اتوق لاتقان المهارات الاساسيه في عملي.	٥٧	
					في المنظمة أفضل المهام التي تثير فضولي حتى لو كانت صعبة التعلم.	٥٨	
					في المنظمة أفضل المهام الصعبة لأتعلم مهارات جديدة.	٥٩	
					علاقتي الشخصية مع العاملين ممتازة	٦٠	
					العمل مع الآخرين صعب	٦١	
					علاقتي مع القادة في المنظمة ايجابية جدا	٦٢	
					الناس اللذين قابلتهم في العمل جيدين	٦٣	
					الابداع يخلق طرق جديدة لتحقيق الاهداف	٦٤	الابداع
					الابداع يطرح طرق جديدة وعملية لتحسين الأداء	٦٥	
					يبحث الابداع أفكار او منتجات تكنولوجية واجرائية جديدة	٦٦	
					الابداع يقدم طرق جديدة لزيادة الكفاءة	٦٧	

				الابداع مورد جيد للأفكار الجيدة أو الإبداعية	٦٨	
				الابداع لا يخاف من المخاطرة	٦٩	
				الابداع يروج و يؤيد لأفكار الآخرين	٧٠	
				يتم الابداع في المنظمة عندما تتاح له الفرصة	٧١	
				الابداع يطور خطط مدروسة ومجدولة لتحقيق أفكار جديده	٧٢	
				الابداع غالبا يملك أفكار جديدة و مبتكرة	٧٣	
				الابداع يأتي بحلول ابداعية للمشاكل	٧٤	
				الابداع غالبا يتخذ المشكله بنهج جديد	٧٥	
				الابداع يقترح طرق جديدة لأداء المهام	٧٦	
				معدل تقديم خدمات جديدة في المنظمة تتم بشكل متسارع	٧٧	الابداع التنظيمي
				معدل إدخال الخدمات الجديدة المقدمة في المنظمة نمت بشكل سريع	٧٨	
				بالمقارنة مع منافسيها، أصبحت المنظمة أكثر إبتكارا	٧٩	

شكرا لتعاونكم

Appendix 3 Coding for Questions Item

GNDR	Gender
AGE	Age
SOST	Social Status
LEDE	Level of Degree
YJPP	Your job position please
FUEX	Full experience
EIPE	Experience in present employer
YWSP	Years with supervisory position
NOSU	Number of Subordinates
HODM	How often during the week do you have contact with your direct manager
LETR	Leadership Training

Idealised Attributes

IDAT1	Instill pride in others for being associated with me
IDAT2	Go beyond self interest for the good of the group
IDAT3	Act in ways that build others' respect for me
IDAT4	Display a sense of power and confidence

Idealised Behaviour

INBE1	Talk about my most important values and beliefs
INBE2	Specify the importance of having a strong sense of purpose
INBE3	Consider the moral and ethical consequences of decisions
INBE4	Emphasise the importance of having a collective sense of mission

Inspirational Motivation

INMO1	Talk optimistically about the future
INMO2	Talk enthusiastically about what needs to be accomplished
INMO3	Articulate a compelling vision of the future
INMO4	Express confidence that goals will be achieved

Intellectual Stimulation

INST1	Re examine critical assumptions to questions whether they are appropriate
INST2	Seek differing perspectives when solving problems
INST3	Get others to look at problems from many different angles
INST4	Suggest new ways of looking at how to complete assignments

Individual Consideration

- INCO1 Spend time teaching and coaching
- INCO2 Treat other to look at problems from many different angles
- INCO3 Consider each individual as having different needs, abilities and aspirations from others
- INCO4 Help others to develop their strengths

Intrinsic Motivation

- INTM1 I enjoy finding solutions to complex problems
- INTM2 I enjoy coming up with new ideas for production
- INTM3 I enjoy engaging in analytical thinking
- INTM4 I enjoy creating new procedures for work tasks
- INTM5 I enjoy improving existing processes or products

Psychological Empowerment

Meaning

- MENG1 The work I do is very important to me
- MENG2 My job activities are personally meaningful to me
- MENG3 The work I do is meaningful to me

Competence

- COMP1 I am confident about my ability to do my job
- COMP2 I am self assured about my capabilities to perform my work activities.
- COMP3 I have mastered the skills necessary for my job

Self-Determination

- SEDE1 I have significant autonomy in determining how I do my Job
- SEDE2 I can decide on my own to go about doing my work
- SEDE3 I have considerable opportunity for independence and freedom to how I do my job.

Impact

- IMPT1 My impact on what happens in my department is large
- IMPT2 I have a great deal of control over what happens in my department
- IMPT3 I have significant influence over what happens in my department

Perception of Support for Innovation

- PESI1 Creativity is encouraged here
- PESI2 Our ability to function creatively is respected by the leadership
- PESI3 Around here, people are allowed to try to solve the same problems in different ways
- PESI4 The main function of members in this organisation is to follow orders which

come down through channel

- PESI5 Around here, a person can get in a lot of trouble by being different
- PESI6 This organisation can be described as flexible and continually adapting to change
- PESI7 A person can not do things that are too different around here without provoking anger
- PESI8 The best way to get along in this organisation is to think the way the rest of the group does
- PESI9 People around here are expected to deal with problems in the same way
- PESI10 This organisation is open and responsive to change
- PESI11 The people in charge around here usually got credit for others ideas
- PESI12 In this organisation, we trend to stick to tried and true ways
- PESI13 I have mastered the skills necessary for my job
- PESI14 This place seems to be more concerned with the status quo than with change
- PESI15 This organisation publicly recognise those who are innovative
- PESI16 The reward system have benefits mainly those who don't rock the boat

Employee Learning

- EMLE1 I want to learn as much as possible from this organization.
- EMLE2 It is important to me to understand the content of this organisation as thoroughly as possible.
- EMLE3 I hope to have gained a broader and deeper knowledge of psychology when I am done with this organisation.
- EMLE4 I desire to complete master the material presented in this class.
- EMLE5 In an organisation, I prefer material that arouse my curiosity, even if it is difficult to learn.
- EMLE6 In a organisation, I prefer material that really challenges me so I can learn new things.

Workplace Social Relationships

- WOSR1 My interpersonal relationship with my workers are excellent.
- WOSR2 Working with others is difficult,
- WOSR3 My relationship to the leaders in my organization is very Positive
- WOSR4 The people I have met at my job are great.

Creativity

-
- CRTY1 Creativity suggests new ways to achieve goals or objectives
- CRTY2 Creativity comes up with new and practical ideas to improve performance
- CRTY3 Creativity searches out new technologies, processes, techniques, and/or product ideas
- CRTY4 Creativity suggests new ways to increase quality
- CRTY5 Creativity is a good source of creative ideas
- CRTY6 Creativity is not afraid to take risks
- CRTY7 Creativity promotes and champions ideas to others
- CRTY8 Creativity exhibits creativity on the job when given the opportunity to
- CRTY9 Creativity develops adequate plans and schedules for the implementation of new ideas
- CRTY10 Creativity often has new and innovative ideas
- CRTY Creativity comes up with creative solutions to problem
- CRTY11 Creativity often has a fresh approach to problem
- CRTY12 Creativity suggests new ways of performing work tasks

Appendix 4 Missing Value

Univariate Statistics

	N	Mean	Std. Deviation	Missing		No. of Extremes ^{b,,a}	
				Count	Percent	Low	High
GNDR	528	1.00	.000	2	.4	.	.
AGE	528	2.85	.940	2	.4	0	0
SOSA	528	1.73	.459	2	.4	0	0
LEED	528	1.71	.705	2	.4	0	0
WOPO	528	1.91	.798	2	.4	0	0
WOEX	527	2.77	1.507	3	.6	0	0
EXCE	528	2.13	1.253	2	.4	0	0
YESP	529	1.74	1.080	1	.2	0	52
SUUS	528	1.91	1.320	2	.4	0	85
MEET	527	4.15	1.128	3	.6	57	0
LETR	524	1.84	1.203	6	1.1	0	0
IDAT1	526	3.25	1.372	4	.8	0	0
IDAT2	525	3.85	1.111	5	.9	0	0
IDAT3	527	4.04	1.130	3	.6	50	0
IDAT4	529	3.94	1.104	1	.2	0	0
IDBE1	528	3.43	1.121	2	.4	31	0
IDBE2	528	3.88	1.408	2	.4	0	1
IDBE3	527	4.09	1.094	3	.6	49	0
IDBE4	527	4.17	1.091	3	.6	44	0
INMO1	528	4.05	.960	2	.4	0	0
INMO2	526	4.21	.805	4	.8	16	0
INMO3	526	3.93	.908	4	.8	0	0
INMO4	524	4.10	.849	6	1.1	24	0
INST1	528	3.79	1.016	2	.4	0	0
INST2	529	4.03	.951	1	.2	0	0
INST3	527	3.88	1.010	3	.6	0	0

INST4	526	3.86	.956	4	.8	0	0
INCO1	529	3.27	1.142	1	.2	0	0
INCO2	528	3.48	1.107	2	.4	33	0
INCO3	526	3.93	1.068	4	.8	0	0
INCO4	525	3.93	1.101	5	.9	0	0
INTM1	526	3.87	.976	4	.8	0	0
INTM2	526	4.04	.801	4	.8	22	0
INTM3	528	3.95	.848	2	.4	29	0
INTM4	526	4.07	.828	4	.8	21	0
INTM5	528	4.10	.870	2	.4	24	0
MENG1	527	4.22	.861	3	.6	22	0
MENG2	525	4.06	.981	5	.9	39	0
MENG3	526	4.12	.927	4	.8	32	0
COCE1	526	4.32	.763	4	.8	12	0
COCE2	526	4.33	.729	4	.8	4	0
COCE3	525	4.26	.742	5	.9	8	0
SEDE1	527	3.81	.941	3	.6	17	0
SEDE2	527	3.69	1.024	3	.6	15	0
SEDE3	529	3.50	1.118	1	.2	31	0
IMPT1	530	3.51	1.013	0	.0	24	0
IMPT2	529	3.54	1.062	1	.2	19	0
IMPT3	527	3.63	1.054	3	.6	22	0
PESI1	528	3.42	1.156	2	.4	48	0
PESI2	526	3.57	1.180	4	.8	33	0
PESI3	530	3.51	1.060	0	.0	24	0
PESI4	530	3.73	1.154	0	.0	0	0
PESI5	529	3.64	1.134	1	.2	34	0
PESI6	530	3.46	1.163	0	.0	43	0
PESI7	530	3.41	1.205	0	.0	45	0
PESI8	530	3.47	1.127	0	.0	23	0

PESI9	530	3.33	1.171	0	.0	0	0
PESI10	529	3.36	1.133	1	.2	38	0
PESI11	528	3.57	1.253	2	.4	0	0
PESI12	529	3.59	1.111	1	.2	36	0
PESI13	529	3.91	1.060	1	.2	59	0
PESI14	529	3.61	1.116	1	.2	33	0
PESI15	529	3.40	1.097	1	.2	34	0
PESI16	528	3.60	1.129	2	.4	34	0
EMLE1	528	3.98	.993	2	.4	41	0
EMLE2	528	4.09	.913	2	.4	36	0
EMLE3	528	3.94	.970	2	.4	42	0
EMLE4	528	4.12	1.967	2	.4	40	1
EMLE5	527	3.87	.986	3	.6	0	0
EMLE6	529	3.90	.992	1	.2	0	0
WOSR1	530	4.08	1.013	0	.0	45	0
WOSR2	528	2.97	1.156	2	.4	0	0
WOSR3	529	3.89	.965	1	.2	.	.
WOSR4	529	3.79	.962	1	.2	30	0
CRTY1	530	4.19	.947	0	.0	33	0
CRTY2	529	4.18	.911	1	.2	37	0
CRTY3	530	4.08	.893	0	.0	33	0
CRTY4	530	4.13	.909	0	.0	35	0
CRTY5	529	4.12	.895	1	.2	34	0
CRTY6	527	3.91	.987	3	.6	0	0
CRTY7	528	3.81	1.028	2	.4	0	0
CRTY8	530	3.92	.979	0	.0	54	0
CRTY9	530	4.08	.899	0	.0	29	0
CRTY10	529	4.01	.953	1	.2	39	0
CRTY11	527	4.05	.923	3	.6	37	0
CRTY12	530	3.96	.971	0	.0	36	0

CRTY13	529	4.12	.933	1	.2	34	0
ORIN1	530	3.38	1.031	0	.0	30	0
ORIN2	528	3.42	1.050	2	.4	29	0
ORIN3	528	3.50	1.112	2	.4	29	0

a. . indicates that the inter-quartile range (IQR) is zero.

b. Number of cases outside the range ($Q1 - 1.5 * IQR$, $Q3 + 1.5 * IQR$).

Appendix 5 Case Summaries of Mahalanobis's Distance

1	59.42341	46	15.33074	91	6.92191	136	9.82451
2	14.89785	47	18.35338	92	3.84813	137	15.88449
3	24.88361	48	10.27614	93	25.47011	138	34.48454
4	6.67743	49	6.30431	94	4.94521	139	9.04040
5	7.01753	50	11.08760	95	8.17630	140	8.74356
6	35.35587	51	23.79822	96	11.63441	141	9.70434
7	11.57024	52	5.20465	97	13.37450	142	5.96912
8	15.18978	53	9.30701	98	7.39853	143	7.03975
9	9.37059	54	6.53715	99	8.87993	144	15.98649
10	9.42179	55	13.35771	100	26.72081	145	7.19221
11	9.63167	56	6.68321	101	13.94185	146	3.10209
12	21.18057	57	10.75418	102	13.94185	147	13.81772
13	17.90564	58	6.18885	103	9.78872	148	5.86165
14	17.94284	59	10.49651	104	6.87666	149	9.96013
15	3.00259	60	11.14250	105	10.30336	150	29.07913
16	5.74845	61	25.50199	106	7.49164	151	26.65165
17	5.17487	62	18.83766	107	9.74349	152	5.96062
18	9.70150	63	23.53446	108	7.32949	153	7.23180
19	26.00047	64	7.68138	109	3.97279	154	8.84553
20	9.32369	65	26.59016	110	22.84058	155	12.13570
21	14.36057	66	21.50111	111	6.59587	156	14.40484
22	22.91449	67	11.29767	112	4.22833	157	17.50623
23	6.83402	68	9.26141	113	3.37362	158	20.81223
24	11.40955	69	31.77092	114	9.05999	159	5.69931
25	17.69794	70	9.87258	115	21.82067	160	29.71415
26	9.73867	71	18.32745	116	5.52970	161	7.08087
27	11.46593	72	18.16467	117	21.41033	162	11.28825
28	19.62702	73	19.47910	118	13.01552	163	8.83439
29	11.85440	74	6.75701	119	14.38977	164	9.70213
30	21.34883	75	6.35092	120	26.13712	165	8.94303
31	17.50848	76	7.53888	121	10.50435	166	9.01142
32	7.46378	77	13.24394	122	11.19505	167	5.23229
33	14.28356	78	8.32303	123	11.33848	168	24.78035
34	6.31272	79	11.04796	124	5.75238	169	27.55976
35	12.99173	80	36.62242	125	15.60687	170	23.67852

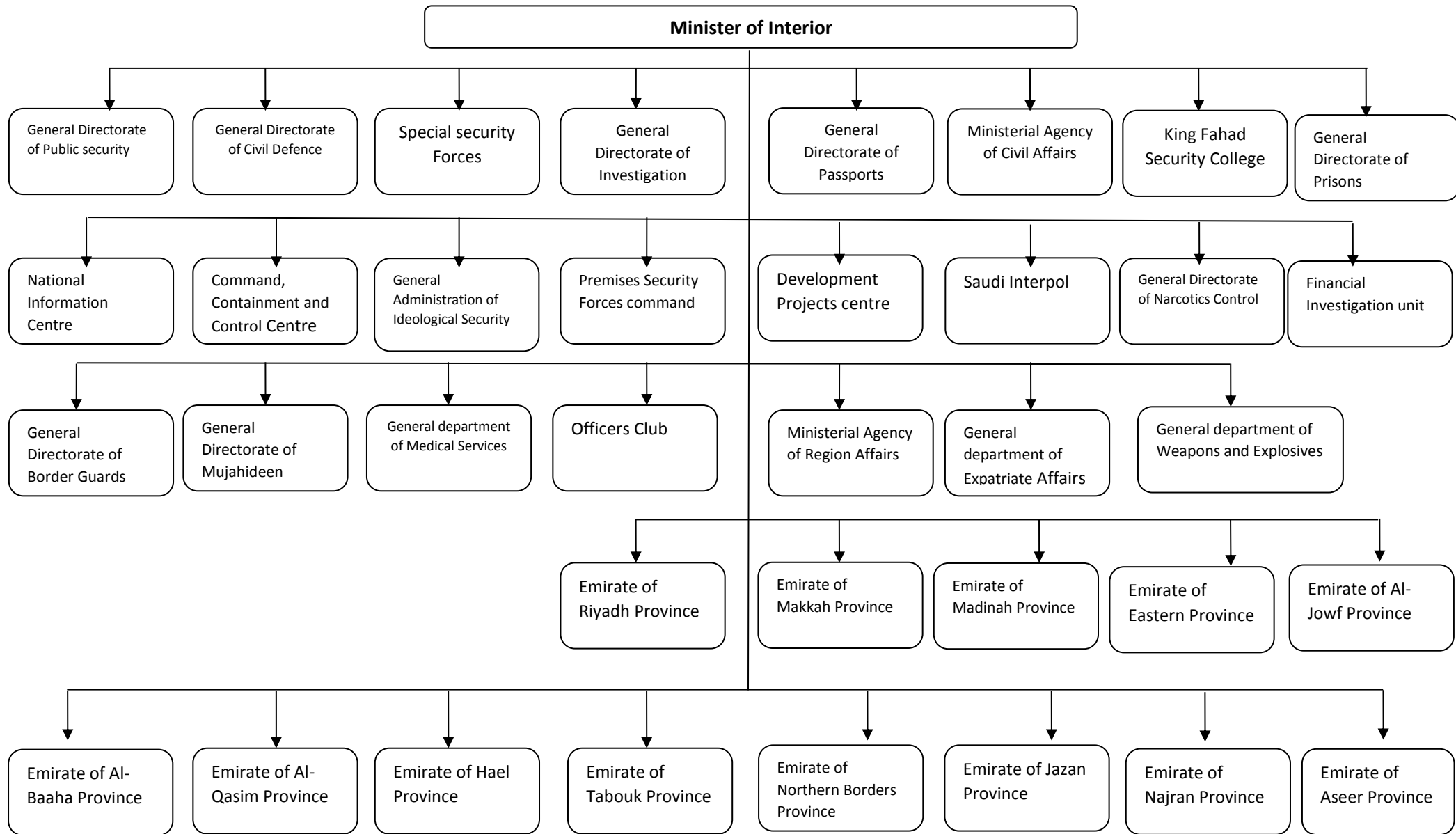
36	3.59563	81	12.82405	126	7.61944	171	8.47206
37	9.39153	82	12.83071	127	3.81742	172	13.02874
38	4.08720	83	6.66437	128	10.21317	173	15.15471
39	10.06065	84	17.88236	129	10.39949	174	8.10650
40	13.01758	85	8.80507	130	41.72293	175	10.84308
41	26.69630	86	7.27103	131	8.71362	176	9.35418
42	6.25558	87	5.99191	132	9.57119	177	15.72524
43	8.40060	88	28.66279	133	6.88226	178	19.75381
44	15.67476	89	15.50091	134	9.31520	179	13.30293
45	58.56032	90	30.13502	135	9.14133	180	7.94251
181	14.31515	226	3.49480	271	33.47930	316	14.20686
182	32.43301	227	28.99095	272	7.36568	317	7.11452
183	13.65421	228	35.05551	273	53.04861	318	58.43738
184	20.36715	229	14.72208	274	8.44617	319	28.43859
185	10.97007	230	6.05682	275	9.79829	320	26.33900
186	49.39825	231	10.39149	276	23.95730	321	5.21488
187	5.14571	232	13.68212	277	6.89935	322	21.36571
188	6.24162	233	17.84915	278	43.41523	323	7.59195
189	8.55581	234	17.13980	279	9.40988	324	13.08774
190	31.84726	235	17.24827	280	10.60120	325	12.67338
191	22.40535	236	9.05922	281	10.48275	326	7.49590
192	7.89237	237	13.49471	282	26.79913	327	15.70765
193	9.35776	238	25.13609	283	13.62732	328	25.29407
194	8.73881	239	14.02086	284	6.45442	329	19.53929
195	6.87553	240	14.60273	285	28.16577	330	13.91699
196	45.52714	241	20.67168	286	13.26330	331	14.89785
197	5.72801	242	17.07279	287	30.83246	332	24.88361
198	15.22621	243	8.86438	288	7.17296	333	6.67743
199	8.13384	244	19.66036	289	42.40136	334	7.01753
200	20.44388	245	16.74135	290	7.76285	335	34.90043
201	9.10649	246	17.06588	291	21.98582	336	11.63092
202	3.63871	247	6.15549	292	4.09214	337	15.26635
203	14.02145	248	18.76501	293	4.41654	338	9.37059
204	24.60143	249	5.80358	294	7.04480	339	9.74918
205	8.76892	250	36.78252	295	6.20496	340	10.08702
206	8.59614	251	10.60971	296	8.67888	341	8.65967
207	19.51191	252	14.51908	297	13.85515	342	17.90564
208	19.34201	253	19.69326	298	29.72614	343	15.23322

209	16.93060	254	12.27844	299	19.49007	344	3.00259
210	6.11455	255	16.04581	300	9.15543	345	5.74845
211	45.92336	256	23.18014	301	22.64213	346	6.42411
212	9.15278	257	16.69049	302	24.92552	347	9.70150
213	10.81573	258	10.58192	303	7.85148	348	14.50308
214	8.46976	259	14.81495	304	13.48679	349	11.14318
215	19.85705	260	28.91691	305	10.95058	350	14.36057
216	25.21004	261	5.57144	306	7.02806	351	9.70436
217	22.80320	262	8.43921	307	8.58888	352	6.83402
218	15.48348	263	12.43348	308	8.41608	353	12.13701
219	8.43304	264	30.23613	309	17.82753	354	17.69794
220	7.95336	265	13.91733	310	35.26858	355	12.67258
221	6.31865	266	37.22881	311	5.89144	356	11.40749
222	21.37545	267	31.81995	312	10.06771	357	19.62702
223	5.95566	268	9.75373	313	9.33547	358	11.17539
224	3.10992	269	13.85161	314	16.19704	359	5.84720
225	4.45518	270	26.29859	315	21.78056	360	6.01367
361	7.46378	406	13.24394	451	6.78588	496	5.23229
362	14.91388	407	8.32303	452	11.33848	497	10.17959
363	6.31272	408	11.04796	453	5.75238	498	8.11028
364	10.69787	409	7.02328	454	15.60687	499	11.28128
365	3.59563	410	12.82405	455	7.61944	500	8.47206
366	9.39153	411	11.11841	456	3.81742	501	13.02874
367	4.08720	412	6.56170	457	10.21317	502	14.27282
368	10.56329	413	17.88236	458	10.39949	503	8.10650
369	13.01758	414	8.80507	459	24.09056	504	10.84308
370	24.50796	415	7.27103	460	8.71362	505	9.35418
371	6.44838	416	5.99191	461	9.57119	506	15.72524
372	24.50796	417	24.29612	462	6.88226	507	19.75381
373	6.47039	418	15.50091	463	8.10604	508	13.18343
374	56.57507	419	13.42748	464	7.93455	509	7.91211
375	15.33074	420	6.92191	465	8.60326	510	154.92376
376	17.86878	421	3.84813	466	15.88449	511	19.52792
377	10.83127	422	12.25101	467	21.06707	512	13.65421
378	7.01714	423	4.94521	468	8.30488	513	9.16595
379	11.08760	424	8.17630	469	8.74356	514	10.97007
380	16.30520	425	11.63441	470	9.70434	515	28.20717
381	5.20465	426	13.37450	471	5.96912	516	5.14571

382	7.76032	427	7.39853	472	7.03975	517	6.24162
383	6.53715	428	8.87993	473	15.41999	518	8.55581
384	13.35771	429	23.08198	474	7.19221	519	31.84726
385	6.38041	430	14.48930	475	3.10209	Total No. 519	
386	11.95806	431	13.67839	476	13.81772		
387	6.93793	432	9.78872	477	5.86165		
388	10.59063	433	6.87666	478	9.96013		
389	11.14250	434	10.30336	479	13.36062		
390	7.86721	435	7.49164	480	14.13246		
391	32.16117	436	9.74349	481	5.96062		
392	23.53446	437	7.32949	482	7.23180		
393	10.31030	438	3.97279	483	8.84553		
394	26.07259	439	4.72796	484	12.13570		
395	7.18263	440	6.59587	485	14.40484		
396	11.29767	441	4.22833	486	17.50623		
397	5.78302	442	3.37362	487	20.81223		
398	33.27373	443	9.05999	488	5.69931		
399	22.34783	444	6.51849	489	17.58213		
400	20.08106	445	5.52970	490	7.08087		
401	18.47192	446	11.78396	491	11.28825		
402	19.47910	447	13.01552	492	8.83439		
403	6.75701	448	14.38977	493	9.70213		
404	6.35092	449	14.59068	494	8.94303		
405	7.53888	450	10.50435	495	9.01142		

a. Limited to first 519 cases.

Appendix6: The administrative structure of the Ministry of the Interior



Director General of public security

Appendix7: The administrative structure of Public Security Sector

