

THE ROLE OF TRANSFORMATIONAL LEADERSHIP ON EMPLOYEES'  
INNOVATIVE BEHAVIOUR

by

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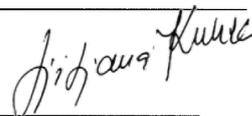
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## **Dedication**

I would like to dedicate this thesis to  
my beloved Family  
and my special mother ... Taghreed Al Muheisen  
my constant force of faith...love..  
and inspiration...

## **Acknowledgements**

I would like to thank God - Allah for letting me through all the difficulties and make this dream come true.

I would like to acknowledge and give my warmest gratitude to my family to my mother to the soul of my father, to my beloved wife wafa, to my sons Saif, Sanad, and Aoun, and my daughter Nouf, to brother Quasi, my brother Samer, and my sister Lama for their prayers, support and care throughout my life.

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ABSTRACT

THE ROLE OF TRANSFORMATIONAL LEADERSHIP ON EMPLOYEES'  
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2023

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Globalization, competition, communication, and rapid technological development pose enormous challenges to higher education in developing countries. It is evident that innovation allows organizations to be competitive and increase their performance. Many scholars have argued that leadership is an important and crucial factor in achieving employees' innovative behavior as part of innovation and creativity. A transformational leadership style has been found to have an influence on innovation.

This study sought to examine the role of transformational leadership on employees' innovative behavior through the mediation of organizational culture, employee work engagement, and attitude towards change in higher education institutions in Jordan. A quantitative methodological style using a questionnaire survey method approach with close-ended questions. The primary data collection was supported by secondary data

collected from a comprehensive review of literature and a conceptual framework was created and developed in addition to ten hypotheses.

The population consists of academics and administrators from both universities. A total of 420 questionnaires were distributed to both universities. The total number of completed questionnaires returned was 404, resulting a response rate of 96.1%. The quantitative data was analysed by using SPSS 20.0 with AMOS 20.0. The structural model was used to test the hypotheses. The results of the study confirmed that transformational leadership style positively and significantly influences employees' innovative behavior in Jordanian higher educational institutions. It also confirmed that employees' work engagement, organizational culture, and attitude toward change play a significant and positive role in the relationship between transformational leadership and employees' innovative behavior.

This study added importance and significant input to the literature in general and the literature of developing countries, including Jordan. Moreover, this study has been tested in the context of higher education, where no other studies have been conducted, which makes this theoretical framework a unique contribution to higher education institutions in general and to developing countries in particular. This study contributes to the literature by enriching the library of theoretical relationships. Also, this study could assist and empower the leaders and policy makers in higher education institutions enhance their innovative behavior.

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## CHAPTER I: INTRODUCTION

### **1.1 Introduction**

Globalization, competition, communications, and technology rapid development, and rapidly changing environment are among several challenges facing organization today all over the world. Those challenges create significant pressure on organization to improve their efficiency and effectiveness. It has been seen that there is a greater need or demand for every organization to undergo flexibility, changes, innovations, and be adaptive to the variation in demands of today's working environment. Leadership is arguably by several researchers as the highest important indicator of innovation behaviour (Jung, D. I., Chow, C., and Wu, A., 2003). Having innovative abilities is considered an important factor to help organizations to bear those mounting pressures (Lowe, 2000). For that, organizations have to be more innovative to be able to measure-up, to be able to developed, and to be able to last more than others (Jung et al., 2003). As a significant organization, higher education institutes are not an exception, they are facing challenges that require innovative behaviour and abilities to be able to face challenges that includes; globalization, competition, technology, rapidly changing environment, to name a few in addition to assist other organizations as well by supporting innovation and solve their existing problems. They are facing global challenges more than ever in our due time (Mathew, 2010). Due to the mounting pressure of many challenges facing higher education that includes; globalization, changing demand and supply of higher education students; funding structure alteration. Higher education institutions worldwide are struggling to survive. Therefore, they are seeking competitive advantages to compete and attract students through innovations (OECD, 2009). Moreover, Higher education institutes can play a critical role with other

organizations through knowledge transfer by supporting innovative behaviour and solve their issues and problems (Fullwood, R.; Fullwoodwely, J.; & Delbridge, R., 2013). In the educational settings, students and teachers could think in an innovative manner in terms of dealing with educational challenges and generating solutions for educational complexities (Shane, 2003). It is evident that innovation allows organizations to be competitive and increase their performance (Gumusluoglu, L., and Ilsev, A.,2009, Hung, R., Lien, B., Fang, S, and Mclean, G., 2010)

Innovative behaviour importance to the individual's effectiveness and survival has been discusses by several scholars, they argued that the innovative behaviour has a great importance for the individual's effectiveness and survival which leads to the sustainability of their development (West, M.; Hirst, G.; Richter, A; and Shipton, H., 2004; Shelly, 1995; Scott and Bruce, 1994; Oldham and Cummings, 1996). The innovative practices and actions of the employees and the role of leaders in appreciating the innovative practices and adopting them are more of a behavioral aspect. The innovative behaviour of employees is dependent on working modalities and environment of the workplace. Leaders have great influence on the behavioral practices of their workers and behaviour of leaders guiding innovative practices is no exception (Anderson, N. R.; de Dreu, C. K.; & Nijstad, B. A., 2004).

Leaders are playing a vital role in influencing the followers' behaviors, and innovative behaviour is not an exception. Several scholars discussed the leaders influence and powers as an importance factor on subordinates' innovative behaviour and performance (Li and Hung, 2009; Jung, 2001; Wang, G.; Oh, I.S.; Courtright, S.H; and Colbert, A.E., 2011). In organizational sitting, leaders style needs to be aligned with the organizational vision, objectives, needs, and culture. Leaders can influence subordinates to better participate and achieve the goals of the organization (Fleishman, 1973). Many scholars argued that

leadership is an important and crucial factor to achieve employees' innovative behaviour as part of innovations and creativity (Noruzy, A.; Dalfard, V.; Azhdari, B.; Nazari-Shirkouhi, S.; & Rezazadeh, A., 2013), Hsiao and Chang, (2011). The role of leadership in higher education setting is flagrant. Proper leadership has the potential to promote organizational innovation by motivating followers and creating a culture to enhance their creative and innovative skills that leads to improve innovation capabilities and competitive advantage for the institution (Li, G.; Shang, Y.; Liu, H.; & Xi, Y., 2014). In terms of leadership style, the transformational leadership style attracted more attentiveness than other styles (Lowe, K.; Kroeck, K.; & Sivasubramaniam, N, 1996). It has been noticed that this style can be found at many levels of the organization and can be found in any organization as well (Bass and Riggio, 2012). Some scholars argued that transformational leadership style is more effective and proactive for organizations to achieve success in this rapidly changing environment than the transactional leadership style (Crawford, C.; Gould, L; & Scott, R., 2003). Den Hartog (2001) explored that transformational leadership might generate innovative behaviour only when the leader is innovative in nature and that an innovative leader will always lead to innovative ideas and leadership skills that will be transferred to his followers to make them more innovative in their belief and approach. In addition, transformational leaders are useful during disturbed times (Bass & Riggio, 2012). Transformational leaders have the ability to turn threats and mistakes into learning opportunity is observed (Avolio and Bass, 2002). Moreover, Transformational leaders are able to support their subordinates and equipped them with the required abilities and skills to be able to achieve better performance through a set of training and educational programs (Yukl, 2013; Northouse, 2007). Transformational leadership style influence over employees' innovative behaviour has been discussed in the literature in general in many sectors including the higher education institutions domain. Transformational leadership

style was the most significant leadership style that influencing creativity (Sosik, J.; Kahai, S.; and Avolio, B., 1998). Transformational leadership when used within the higher education setup, it creates a friendly and responsive environment where students can learn and showcase their skills in a free manner. This form of leadership is also useful in driving the innovative behaviour as students are offered an environment where motivation drives their thinking leading to innovative ideas (Montana; Patrick J.; and Bruce H., 2008).

The Jordanian higher education was established in the second half of the twentieth century. It started when several colleges for teachers throughout Jordan established to cater for the demand of teachers' manpower to meet schools' education. However, the first public university was established in 1962 only, it was named the University of Jordan, followed by Yarmouk university in 1976. Later another eight public university were established across Jordan to date. The first private university ever established in Jordan was Amman University in the year 1990, after more that 28 years. Then another 18 private universities to date. It only happened after the Jordanian coucal of higher education issued the first policy document that authorized the establishment of private universitates (Ababneh, 2004).

Jordanian higher education faces several challenges that includes slowness of strategic management implementation; lack of resources; inadequate organizational support; resistance to change among higher education staff; lack of mechanisms to implement changes to the system; mismatching of organizational structure with the management strategic process; unstable leadership (Batarseh, 2014)

In the Jordanian leadership setting, it has been noticed that transformational leadership in addition to the transactional leadership styles are existing in many Jordanian organizations. However, transformational leadership style is more effective transactional leadership styles implementation of strategic goals when a study on the impact on strategic implementation

objective in the ministry of ministry of Environment of Jordan was conducted by Salih and Mubaideen (2008). For higher education institutes domain, Jordan is not an exception, they are facing many challenges as argued by several schools (Mahmood, 2010; Al-Zyoud, 2011; Badran, 2014; Batarseh, 2014). The admission dilemma in the public Jordanian universities, as it is highly subsidized by the Jordanian government. Therefore, the admission to public universities is more competitive than at the community colleges level or the private universities. Moreover, the need for enhancing the curriculum appears to be a challenge; the curriculum development usually faces several challenges in structuring, implementation, and obtaining the desired results in Jordanian universities as discussed by Mahmoud (2008). Jordanian higher education faces several challenges that includes slowness of strategic management implementation; lack of resources; inadequate organizational support; resistance to change among higher education staff; lack of mechanisms to implement changes to the system; mismatching of organizational structure with the management strategic process; unstable leadership (Batarseh, 2014).

In conclusion, the higher education system is been recognized the economic and social development mechanism of any country which include Jordan as well. In addition, it has been observed that innovation is the driver of this growth by adapting new ideas and innovative behaviour towards the prosperity of the any society.

This study added importance and significant input to the literature in general and the developing countries including Jordan. Moreover, this study has been tested in the higher education context where no other studies were been conducted, which make this theoretical framework unique contribution to the higher education institutions in general and to the developing countries in particular. The following sections will deliberate aim; objectives; and significance of the study. Followed by the research questions and methodology, in addition to the context and contribution, closing by presenting the research structure.

## **1.2 Research Problem**

The focus of this research is on transformational leadership and employees' innovative behaviour. This study is considered significant, as the researcher did not find any study that examines the relationship between transformational leadership and employees' innovation behaviour and/or through the mediation of organizational culture, employees' work engagement, and employees' attitude toward change in the higher educational institutional context, particularly in Jordan. Moreover, this research emphasized the lack of empirical researches in the domain of transformational leadership on innovative behaviour through the mediation of organizational culture, employees' work engagement, and employees' attitude toward change in general in the developing countries, namely the Arab countries. Although the literature review chapter presented the relationship between transformational leadership and employees' innovative behaviour and/or through the mediation of organizational culture, employees' work engagement, and employees' attitude toward change, the literature has also observed the significance and complexity of those relations. Therefore, this study has endeavored to go further and empirically test those relations for the first time in the higher education sphere in Jordan. Based on this gap, the study will examine the relationship between transformational leadership and innovation behaviour and/or through the mediation of organizational culture, employees' work engagement, and employees' attitude toward change in the higher educational institutional in Jordan.

## **1.3 Purpose of Research**

This research purpose aims to present the co-relation and examine the relationship between transformational leadership and employees' innovative behaviour and/or through examine the relationship between transformational leadership and employees' innovative

behaviour through the mediation of organizational culture, employees' work engagement, and employees' attitude toward change in the Jordan higher education institutions.

The higher education organizations have a unique setups and objectives and concerns with enhancement of learning and behaviors in addition to generation of knowledge, they must have a unique set of effective characteristics (Kalargyrou, V.; Pescosolido, A. T.; & Kalargiros, E. A. (2012). Moreover, today they need to deal with many challenges in terms of globalization and technological evolutions (Mathew, 2010). Higher education institutes alongside with other organization are considered vital in terms of knowledge transfer, problems solving, and innovative support (Fullwood, R.; Fullwoodwely, J.; and Delbridge, R., 2013).

The purpose of this study is to explore the opportunity provided for leaders, academics, practitioners, in addition to policy makers to gain recognition by adopting transformational leadership style. Based on this, the objectives designed for the study are:

- To employ the theory of transformational leadership to investigate the employees' innovative behaviour, organizational culture, employees' work engagement, and employees' attitude toward change.
- To analyze the mediating role of organizational culture, employees' work engagement, and employees' attitude between transformational leadership and employees' innovative behaviour
- To verify the impact of organizational culture, employees' work engagement, and employees' attitude toward between transformational leadership and employees' innovative behaviour in Jordan higher education institutions.
- To recommend various strategies, that can help higher education institutes to adopt transformational leadership style for enhancing employees' innovation behaviour.

#### **1.4 Significance of the Study**

The significance of this research can be found in the contributions to both theory and practice. This research main objective is to examine the effect of transformational leadership on employees' *innovative* behaviour through the mediation of organizational culture, employees' work engagement, and employees' attitude toward change. Literature reveals the importance of innovative behaviour to the individual effectiveness and survival. It has been discussed by several scholars whom argued that the innovative behaviour has a great importance for the individual's effectiveness and survival which leads to the sustainability of their development (Scott and Bruce, 1994; Shelly, 1995; Oldham and Cummings, 1996; West et al., 2004). This study advances the relation between transformational leadership and innovative behaviour by providing an insight into the mediation role of organizational culture, employees' work engagement, and employees' attitude toward change in higher education institutes settings. To the best of the researcher's knowledge, the mentioned relations have not been researched in the developing countries or the Arab countries including Jordan.

Moreover, this study is the first study to examine the effect of transformational leadership on innovative behaviour through the mediation of organizational culture, employees' work engagement, and employees' attitude toward change in higher educational context in the developing countries, namely Jordan, which make this research significant.

The higher educational institutes are considered as one of the most important originations in any county. It is considered as one of the main vehicles to advance innovations and knowledge. Higher education institutes alongside with other organization are considered vital in terms of knowledge transfer, problems solving, and innovative support (Fullwood, R.; Fullwoodwely, J.; and Delbridge, R., 2013). Students and teachers could think in an innovative manner in terms of dealing with educational challenges and generating solutions

for educational complexities (Shane, 2003). It is evident that innovation allows organizations to be competitive and increase their performance (Gumusluoglu & Ilsev, 2009, Hung et al., 2010). Leader's style needs to be aligned with the organizational vision, objectives, needs, and culture in organizational setting. Leaders can influence subordinates to better participate and achieve the goals of the organization (Fleishman, 1973). Many scholars argued that leadership is an important and crucial factor to achieve employees' innovative behaviour as part of innovations and creativity (Hsiao & Chang, 2011; Noruzy et al., 2013). Furthermore, leader have a great influence on the behavioral practices of their workers and behaviour of leaders guiding innovative practices is no exception (Anderson et al., 2004). Leadership styles are varying in terms of effectiveness towards followers. The transformational leadership style performs more effectively, this style attracted more attentiveness than other leadership styles (Lowe et al., 1996). Therefore, Managers need to fully utilize transformational leadership to succeed (Erkutlu, 2008). It has been noticed that this style can be found at many levels of the organization and can be found in any organization as well (Bass and Riggio, 2012). An innovative leader will always lead to innovative ideas and leadership skills that will be transferred to his followers to make them more innovative in their belief and approach (Den Hartog,2001).

This research can be considered as the first research to be conducted across Jordan and specifically in the higher educational sector. This research offers a perception for leaders, academics, practitioners, in addition to policy makers on leadership and innovative behaviour status and suggested solutions to enhance thus important behaviour in this sector and underlined the impact of the leadership styles adopted in those institutions that can be adopted to enhance and develop this crucial behaviour. Thus, this research holds great deal of significance in terms of ascertaining whether transformation leadership plays a positive and important role in enhancing the employees' innovative behaviour or not.

The outcomes achieved from collecting the data and demonstrated the process of analysis technique of the gathered data and the testing of the suggested hypothesis to inspect transformational leadership role on innovation behaviour and or through the mediation of organizational culture, employees' work engagement, and employees' attitude toward change in the higher educational institutional in Jordan. Although the literature review chapter presented the relationship between transformational leadership and employees' innovative behaviour and or through the mediation of organizational culture, employees' work engagement, and employees' attitude toward change, the literature has also observed the significance and complexity of those relations. Therefore, this study considered significant and has endeavor to go further and empirically testing those relations for the first time in Jordan in general and in the domain of higher education in particular.

### **1.5 Research Purpose and Questions**

This research attempts to examine the impact of examine the effect of transformational leadership on employees' innovative behaviour through the mediation of organizational culture, employees' work engagement, and employees' attitude toward change among the higher educational organizations in Jordan. Research questions are originated from the importance of this study in an attempt to contribute to the existing literature and fill the gap of lacking such researches that examines transformational leadership on employees' innovative behaviour through the mediation of organizational culture, employees' work engagement, and employees' attitude toward change in higher educational institutions in Jordan. Main question of this research is;

*What is the role of transformational leadership on employees' innovative behaviour in higher educational institutions in Jordan?*

In order to improve the research question, the researcher proposed the following ten questions so as to provide necessary information aiming to answer the main question;

*Q1. What is the role of transformational leadership on employees' innovative behaviour in higher educational institutions in Jordan?*

*Q2. What is the role of transformational leadership on organizational culture in higher educational institutions in Jordan?*

*Q3. What is the role of organizational culture on employees' innovative behaviour in higher educational institutions in Jordan?*

*Q4. Does organizational culture positively mediate relationship between transformational leadership and employee's innovative behaviour in higher educational institutions in Jordan?*

*Q5. What is the role of transformational leadership on employees' work engagement in higher educational institutions in Jordan?*

*Q6. What is the role of employees' work engagement on employees' innovative behaviour in higher educational institutions in Jordan?*

*Q7. Do employees work engagement positively mediate relationship between transformational leadership and employee's innovative behaviour in higher educational institutions in Jordan?*

*Q8. What is the role of transformational leadership on employees' attitude toward in higher educational institutions in Jordan?*

*Q9. What is the role of employees' attitude toward change on employees' innovative behaviour in higher educational institutions in Jordan?*

*Q10. Do employees' attitude towards change positively mediate relationship between transformational leadership and employee's innovative behaviour in higher educational institutions in Jordan?*

The research methodological approach is designed to empirically confirm the proposed theoretical model and demonstrate the foundation to answer the proposed questions and suggested hypotheses by the researcher. The research will be deductive in nature. The deduction is the testing theory which is commonly applied in scientific researches. In this study, the application of deductive theory will help in the testing of data. As identified by Saunders, M.; Lewis, P.; and Thornhill, A., (2012), the deductive strategy the study will focus on five stages, which includes:

- i. Development of relational the hypotheses of the existing theory
- ii. Stating hypotheses and their operational standings
- iii. Testing the hypotheses by applying statistical analysis
- iv. Examining the outcomes and confirming the theory
- v. Modifying the theory, if necessary, as per the findings

Basic tests of the data were implemented to analyze the data that includes; data screening; missing value treatment; demographical variables. Based on this analysis, Exploratory Factor Analysis (EFA) analysis for research' instrument was presented based on SPSS 20 results. Then, the researcher will apply the Structural equation modelling with Amos 20.0 and applying the Confirmatory factor analysis. Later, (CR) Composite Reliability and (AVE) Average Variance Extracted were discussed. The elements of the research methodology will be discussed in details in the methodology chapter of this study.

## CHAPTER II: REVIEW OF LITERATURE

### **2.1 leadership**

The concept of leadership emerged by Chinese and Greek philosophers and throughout the decades, there is no consistent characterization available regarding the leadership. Despite the fact that leadership concept is considered one the most discussed field all over the world. There are so many different definitions of leadership concept as many as the people who have attempted to define it (Schmidt, 1974). There are 65 different classification systems have been developed in the past 60 years to define leadership dimensions (Fleishman, E.A., Zaccaro, S.J. and Mumford, M.D., 1991). Consequently, in last century various researchers extensively studied the concept of leadership and besides varied definitions, numerous models, theories, and types were developed. Mintzberg (1998) stated that “leadership” is a concept that is most commonly researched but least understood by most of researchers. Max Weber initiated research on leadership through some detailed empirical studies at the beginning of the 20<sup>th</sup> century; the concept has evolved through the years by many leadership researchers such as John Maxwell until the 21<sup>st</sup> century (Turnbull and Edwards, 2005). Hence, leadership could be considered as a phenomenon that has one of the most extensive academic productions over the years. Some researchers, such as Tannenbaum and Schmidt (1973); Montgomery (1961); Kotter (1990) shared the common theme of leadership, which indicates the leadership as a strategy that allows the person to potentially influence others towards achieving the defined goal. Miner (2005) concluded that there are number of things that differentiate leaders from others. Over the past years, many studies have been conducted and developed numerous schools of thoughts regarding leadership aspects like charismatic, traits; situational; transactional; and transformational to name a few. In organizational setting, the leadership trait approach

was attempted in early times, it proposed that some people with special traits were born which made them leaders. In this regard, the trait theory based on individual traits like confidence, intelligence, and self-efficacy could be assumed as quite important in identifying leaders. However, this theory has been questioned on the grounds of neglecting other traits like social skills, values, expertise, and problem-solving skills as this approach was studied by many scholars, in addition to (Stogdill, 1948, Stogdill, 1974). This theory identifies few traits and ignores other traits. It did not succeed in providing a set list of traits for leadership, it did not adequately link the traits with other outcome such as group and team performance. In addition, this approach was not useful in providing development and training for (Northouse, 2007). For that, that behaviour leadership was attracting more attention than the traits. Tittmore (2003) pointed that discussing a leadership theory is not as important as discussing the leadership styles. This is mainly because of the fact that different leaders have different styles that shape the behaviour and thinking of people around them. The other leadership approach that has been used extensively in organizational leadership training and development was developed and revised several times over, was the situational approach, where leaders espouse the style fitting the situation, they are in which was established by Hersey and Blanchard (1977,1988). In this approach leaders tie their style according to the organization needs and follower commitments (Yukl, 2010). It does not have a strong body of research findings to justify and support the theoretical supporting on which it stands. Also, this approach it is not clear in explaining how followers move to a higher development level, nor how commitment changes over time for the followers. Moreover, this model of leadership does not address how demographic characteristics affect employees' performance for leadership and does not offer a model for how this can be used in group settings as different for one-to-one settings. In conclusion, the situational leadership approach has limitations (Northouse,

2007). The former leadership approach that has been initially introduced by (Burns, 1978) is the transformational and transactional leadership theory. Odumeru and Ogbonna (2013) stated that transformational and transactional leadership theories are the most popular leadership theories. Where, transactional leadership style is about the exchange between the follower and leaders (Ergeneli, A.; Gohar, R.; & Emirbekovaz,T., 2007). and Transformational leadership style is about promoting radical change and elevating followers needs (Fitzgerald & Schutte, 2010). Bass and Avolio (1994), argued that transformational leadership augments transactional management and obtains high levels of follower performance. The main difference is in the process by which the leader motivates followers and the types of objectives that are set. Wehrich, H.; Cannice, M.V.; and Koontz, H., (2008), considered transactional leadership as a subset of transformational leadership. Although many researches have considered a mix of both leadership styles, they noticed that transformational leadership style is more effective than the transactional leadership style, and over time the transformational style has acquired wide popularity amongst scholars than the transactional style. Transformational leadership style is more accepted than transactional style (Zeffane, 2010). They also called managers for fully utilize transformational style to succeed in this changing and challenging environment (Erkutlu, 2008). Van Wormer; Katherine S.; Besthorn, Fred H.; and Keefe, Thomas., (2007) argued that transformational leadership is a way of guiding and motivating subordinates to achieve common goals. It has been noticed that this style can be found at many levels of the organization and can be found in any organization as well (Bass and Riggio, 2012).

## **2.2 Theoretical leadership framework**

Some scholars argued that the two basic leadership styles that explains the relationship between leaders and their followers are transactional and transformational leadership (Gadot and Beerli, 2012). Transformational and transactional leadership theories

are the most popular leadership theories (Odumeru and Ogbonna, 2013). Transactional leadership is considered to be a subset of transformational leadership (Wehrich et al., 2008). Transformational leadership obtains high level of subordinate's performance and enhances transactional leadership (Bass and Avolio, 1994). Transformational leadership style is more accepted than transactional style (Zeffane, 2010).

Transformational leadership and transactional leadership styles has been considered widely in the higher education studies. Since colleges and universities has a unique setups and objectives and concerns with enhancement of learning and behaviour in addition to generation of knowledge, they must have a unique set of effective characteristics (Kalargyrou, V.; Pescosolido, A. T.; & Kalargiros, E. A. (2012). Faculty members need to be more transformational or transactional leadership styles to satisfy their subordinates satisfaction and encourage them to make greater efforts to study (Khan et al., 2011). However, transformational leadership helps in empowering subordinates rather than just exchanging ideas with them along with guiding them through words (Gu & Peng, 2011). This form of leadership is quite effective when leaders and followers are integrated to achieve common goals rather than having distinctive goals. Mei, R.Z.; Peng, J.S.; and Yang, J.Z (2012) further argued that transformational leadership is effective when both leaders and followers have similar goals and respect for each other. It is beyond exchanging of ideas and more of sharing similar stories, ideas, motivation, beliefs, and goals. However, implementing transformational leadership is purely based on the nature of the leader and the support they received from the followers. It is a two-way process, where both leaders and followers need to work together to achieve common goals through effective planning, communication, and strategies. Basadur (2004) stated that when transformational leaders lead by examples and acts, they create an environment that pushes the limit of each follower. It becomes a friendly setting where ideas are exchanged freely and thoughts and

motivation for further actions. However, such leadership style might also affect the motivation level of followers if the leader is unable to set examples and lead from the front. Even though, the complexities of transformational leadership are quite low and limited, they need to be executed well to create an impact on the behaviour of followers. Den Hartog (2001) further added that transformational leadership might generate innovative behaviour only when the leader is innovative in nature. An innovative leader will always lead to innovative ideas and leadership skills that will be transferred to his followers to make them more innovative in their believe and approach.

In the Jordanian leadership setting, it has been noticed that transformational leadership in addition to the transactional leadership styles are existing in many Jordanian organizations. In the banking sector domain for instance both styles produce a high level of performance (Alawneh & Al-Dmour, 2011). However, transformational leadership style is more effective transactional leadership styles implementation of strategic goals when a study on the impact on strategic implementation objective in the ministry of ministry of Environment of Jordan was conducted by Salih and Mubaideen (2008). Another research was conducted in the industrial sector of Jordan to examine transformational and transactional leadership styles effectiveness found out that both styles have an effective on innovation leaning, however, the transformational leadership style has a higher level of effectiveness than the transactional leadership style (Khali and Al-Tamimi, 2008).

The leadership in higher education context in Jordan was not researched as needed, the literature has presented a few studies that tackle this important matter. For example, a study that discussed the used leadership styles by Al-Khasawneh and Futa (2013), examined the impact of leadership styles used by faculty in Jordanian public universities on modification of student behaviour. They discovered that democratic style had a positive impact on modifying students' behaviour when they focused on autocratic, laissez-faire, and

democratic leadership styles. Ehigie (2004) stated that democratic leadership style is quite influential because of the fact that, it allows equal participation of leaders and followers along with offering them a chance to share their views and opinions. However, taking actions is restricted to leaders based on seeking the views of followers. This kind of leadership is quite universal in nature, the majority of the schools use this approach to facilitate teacher-student interaction and relationship.

In the Jordanian private universities' culture context, a study on transformational leadership style of the manager' gender, argued that there is no significant behaviour difference were found between male and female managers of that private university when they deal with the subordinates regarding individual consideration, idealized influence, and inspirational motivations. This means that gender does not have an enormous role regarding the impact of transformational leadership on university' students. However, there was a significant difference between transformational male and female managers regarding intellectual stimulation. Thus, transformational male managers might lead to better intellectual stimulations compared to transformational female managers and vice versa (Judeh, 2010). However, such findings are not always accurate and there is no absolute truth that gender plays a decisive role in intellectual stimulation through transformational leadership (Hislop, 2005).

This is mainly because of the fact that, such impacts are generated by the beliefs, acceptance, values, ideologies, and perceptions of followers that vary because of the difference in cognitive and social attributes being influenced by a number of demographic and social factors. Thus, it can be said that from theoretical perspective, the rise and emergence of transformation leadership have been quite welcoming helping in transforming the beliefs and thinking of followers. However, there is also a difference between theoretical and rationale perspective (Jaussi, 2003). Until and unless, the

usefulness and relevance of transformational leadership is not associated with any case study or phenomenon, it becomes hard to accept the usefulness.

### **2.3 Transformational leadership**

Transformational leadership style has been discussed by many scholars over the years. this style can be described as a process, where people transferred and changed. It includes changing and transforming personal values and self-concept to increase the subordinates' efforts to impact the organizational effectiveness (Bass and Riggio, 2012). The assumption of leadership theory based on that the followers needed to be respected, appreciated, admired, and trusted so as leader can achieve their loyalty. It assumes that they have a special contribution to deliver (Yukl, 2013). Transformational leadership is a charismatic type of personality trait in leaders, which actually enhances and develops the followers' motivational level and stimulates them to work harder with complete determination to achieve common goals. This style of leadership inspires people, which further helps in achieving remarkable outcomes. The followers are given authority and command over their jobs, which not only boosts their confidence but, also enables them to work harder to develop their skills and relationship with the leader and this portrays the individualistic consideration component of this type of leadership (Wang et al., 2011). Such leaders also mobilize people into several groups are increasing their motivational level to work in teams and achieve their goals. Those leaders have a unique style that inspires; they have empathy for everyone and are role models for their followers. They support change and innovations at work that is essential for enhancing the worker's capabilities and morale to a greater level. Transformational leaders' welcome challenges and drastic changes in a work environment and are very flexible in nature in order to, adjust to the variations and demands at work, and also involve the people and engage them into several activities by giving them autonomy to take decisions and control for achieving success Dumdum et al., 2013). This portrays the intellectual stimulation component of transformational leadership (Avolio and Yammarino, 2013). The use of transformational leadership allows

organizations to gain efficiency in business management as it allows the development of relationships with subordinates (Pieterse, A.N.; Van Knippenberg, D.; Schippers, M.; and Stam, D., 2010). Hirst, G.; Mann, L.; Bain, P.; Pirola-Merlo, A.; and Richver, A (2004) stated that the notion of transformational leadership was first coined by James Downton that was further developed and enhanced by a leadership expert James Burns. He quantified that transformational leadership is the platform through which leaders and followers advance each other to higher level of morality and motivation in a planned manner. Burns further believed that both transformational and transactional leadership are similar in nature but later was challenged by Bernard Bass that expanded the idea of Burns. Bass (1990) stated that transformational leadership is based on the impact created by leaders on followers. This kind of leadership flourishes because of the true, respect, and admiration gained from the followers. Bass (1990) further focused on the role of psychological mechanisms in underlying the transformational leadership. He suggested that leadership can display different attributes but if it is transforming the lives of followers, it matters the most.

In last few years, transformational leadership has gained more momentum. It was further stated that the impact of transformational leaders can be easily measured in terms of the influence on followers. Jacobsen (2001) argued that over a period of time, the transformational leadership had evolved a lot, with many academicians believing that transformational leaders offer much more than expected to followers along with inspiring their mission and vision to offer a robust identity in a meaningful manner. These leaders challenge the existing realities and truths in order to make their supporters successful using a unique and innovative approach.

Miller (2005) added that such leaders have the ability to motivate; to inspire; and to be seen as a role model for followers as well. They also show genuine concern for the needs of

their followers along with challenging followers to be innovative and creative. This also helps in facilitating the innovative behaviour in followers. Over a period of time, different advantages and disadvantages of transformational leadership have evolved in different settings and environments.

Price (2012) argued that transformational leadership in last few years was all about communicating excellent and new ideas along with establishing trust and strong bonds. It is based on having empathy towards others along with presenting an image that is hard to ignore but easy to follow. Shamir (2011) further added that the idea of transformational leadership in last few years attached to new and small companies requiring support from an inspirational figure whom can guide and motivate in a positive manner.

New age leaders are often young and flexible in nature, with no pre-defined personality and image that is quite different from the notion of transformational leadership. This form of leadership is quite outdated in nature and requires great deal of retooling along with change in the role for leaders and followers. However, Miller (2005) further added that transformational leaders even in today's competitive business landscape remains the biggest motivators whom can change the dynamics of any company through effective motivation of followers and guiding them in the right direction by using their personality, reputation, knowledge, and awareness.

Zeffane (2010) stated that transformational leadership currently is more acknowledged among scholars than transactional leadership. In addition, Rensburg (2007) suggested that the fundamental qualities of the transformational leaders need to look beyond personal achievements and not intentionally use their power and influence to make themselves look good that would enable them to influence others in a way that they jointly contribute to transformation. Kapp (2000) describes transformational leaders as change agents and risk-takers; he views them as flexible persons who are open and willing to learn from

experience. Moreover, Middlehurst (1998) stated that at the heart of transformational leadership there are higher order change for individuals and organizations as well. The four key areas that several scholars focused in addressing transformational leadership Idealized influence, Inspirational motivation, Individualized consideration, and Intellectual stimulation (Avolio & Bass, 2002; Antonakis et al., 2003; Bass and Riggio, 2012).

Idealized influence indicates the charisma of the leader, it offers vision; mission; respect; pride; and trust (Bass, 1990). It sets an example for the follower to look up to. Therefore, we can argue that transformational leadership has evolved a lot in last few years and should continue to do the same in order to be impactful in facilitating innovative behaviour among followers. It's viewed in terms of attributes and behaviour.

Inspirational motivation indicates the follower's motivation to be more committed to the vision of the organization. Leaders under inspirational motivation can encourage followers to focus on the objective of the organization that offer challenge and meaning to the workplace (Avolio & Bass, 2002). Leaders under inspirational motivation can encourage team spirit, collaboration among members of the organization, identification of new ideas, and inspire the followers to envision a better attractive future (Northouse, 2007).

Individualized Consideration stated that transformational leader with individualized consideration style builds interactive relationship with their followers with attention (Avolio & Bass, 2002). Leaders under individualized consideration behave as a mentors and coaches to support their followers to be fully actualized to develop with empathy and consideration a job-related competency (Northouse, 2007). Leaders under individualized consideration have the ability to build self-confidence and self-determinations (Bass & Riggio, 2012). Leaders under individualized consideration can build with their followers a one-to-one relationship in addition to recognize the followers wants, abilities, and ambitions (Bass & Avolio, 1994).

Intellectual stimulation as the most important dimension of them all as it fosters rationality; intelligence; and problem solving to the followers ( Bass, 1990). Leaders under intellectual stimulation can assure their followers that their ideas will not be criticized if they differ from the leader's ideas (Avolio and Bass, 2002). They enable the follower to be more innovative and creative (Yukl, 2010).

To conclude. Those four transformational leadership key areas or dimensions in the form of idealized influence, inspirational motivation, individualized consideration, and intellectual stimulation are positively affecting the followers in order to enable them and motivate them to reach to their best abilities to accomplish their desired achievements. Consequently, those four elements of transformational leadership are expected to affect the followers to be more innovative and creative in addition to encourage the followers to develop and adopt more innovative behaviour.

### 2.3.1 Why Transformational leadership?

Transformational leadership has gained more momentum in last few years. Jacobsen (2001) argued that over a period of time, the transformational leadership had evolved a lot, with many academicians believing that transformational leaders offer much more than expected to followers along with inspiring their mission and vision to offer a robust identity in a meaningful manner. These leaders challenge the existing realities and truths in order to make their supporters successful using a unique and innovative approach. Although, several scholars have looked at and studied the mixture of both transformational and transactional leadership, many have argued that transformational leadership style are more effective than transactional leadership style specially in organizational setting since transformational leadership style can be applied at different level of the organization. Transformational leadership style can apply to any organization and can be found at

deferent levels of the organization (Bass & Riggio, 2006 - 2012). It was further stated that the impact of transformational leaders can be easily measured in terms of the influence on followers. Transformational leadership style is more effective on the employee's personal creativity than transactional leadership style.

The benefits of transformational leadership have been argued by several scholars over the past years and tackling several aspects of those advantages on both the organizations and the followers. This transformational leadership style works on turning threats into opportunities for followers to learn from according to Avolio & Bass, 2002. And can be very valuable and useful throughout unsettle times (Bass & Riggio, 2012). It also, have the ability to eliminate stress; to create a sense of identity; and enhance the network support in the organization members (Antonakis et al., 2003). Transformational leadership style can boost the followers to engage more in educational and skills development programs so as to enhance their performance (Yukl, 2013). Transformational leaders can appear in time of stress and focus in social values (Northouse, 2007). Transformational leadership style can create a knowledge supporting environment and facilitate learning activities (Gunter, 2001). This style of leadership can boost the learning of the organization, in addition to enhancing the creativity of the organizational employees (De Jong & Hartog, 2007). Moreover, Transformational leadership have the ability to promote innovative culture and knowledge transfer in any organization to it is best possible like the motor and transmitter of the machine (Saenz, 2011).

### 2.3.2 Transformational leaders and their role as innovative authority in HE

The innovative practices and actions of the employees and the role of leaders in appreciating the innovative practices and adopting them are more of a behavioral aspect. The innovative behaviour of employees is dependent on working modalities and

environment of the workplace. Leaders have great influence on the behavioural practices of their workers, and also, the behaviour of leaders guiding innovative practices is no exception (Anderson et al., 2004). Nevertheless, the last two decades have been associated with transformational and enigmatic aspects of leaders. Despite of the appealing nature of leaders, their behaviour guides the performance for innovative oriented outcome. Various studies have been done to establish the relationship between behaviour of leaders and individual innovations, and the manner in which these relationships attribute to transformational leadership participative leadership along with the (LMX) theory, based on leader member exchange (Shin & Zhou, 2003).

Principally it has been perceived those transformational leaders might inspire the employees to find more creative solutions to the existing problems which, can result in innovative employees. but rationally this aspect cannot propose unanimously. In many studies it has been perceived that the culture of the workplace and the nature of the job may transpire into innovative leadership. The workplaces and the cultural aspects might see the innovation aspire the transformational leadership but in most of the cases the productivity and commitment still dominate the decision-making process (Jaussi & Dionne, 2003).

Moreover, as per LMX theory the attribute of “social exchange relationships” between leaders and its employee’s results in greater outcome, satisfaction, commitment and performance; it can be attributed that the relationship between leaders and employees can be related to innovativeness (Yukl, 2002). The leaders associated with researches, scientists and educational setup pertaining to new developments in technology and its implementation as per Judge, W. Q.; Gryxell, G. E.; & Dooley, R. S. (1997) do encourage the innovative culture at their work place (Judge et al., 1997).

Montana et al., (2008) stressed on the fact that transformational leadership has helped in creating more leaders as this method of leadership is purely built on extracting the best out

of individuals through effective guidance and motivation. Schultz; Duane P. Schultz; and Sydney Ellen (2010) supported this argument by adding that, transformational leadership has been practiced in a number of organizational settings that leads to employees' innovative behaviour because freedom of enhancing leadership traits is offered along with proper guidance. Miner (2005) further added that even though transformational leadership is often practiced in different settings, it might not be a right approach for all settings. In regards to education and higher education, it can be said that the role of leadership is quite important. For example, Bryman (2007) in higher educational setting conducted extensive research on leadership. He identified several ways that could lead to effective leadership behaviour in the higher educational system. Mintzberg (1998) stated that effective leadership could only occur in a higher educational setting if a professional bureaucratic approach is adopted where the leaders do not adopt any form of communication with the subordinates.

In contrast, this approach was later criticized on the basis that in the dynamic setting of a higher education system adopting a bureaucratic attitude would not lead to effective forms of learning; and hence, a more flexible leadership style should be adopted. The reason being, a flexible leadership style promotes the generation of innovative ideas and more efficient ways to solve problems (Avolio, B. J.; Walumbwa, F. O.; and Weber, T. J., 2009). In addition to the top-level leadership, leadership is also important at the levels of deans and department heads in promoting and activating engagement with their teams. Deans and academic department chairs have a critical role in building a collegiate/department team climate (Gmelch and Miskin, 1993).

Montana et al., (2008) further added that when transformational leadership is used within the higher education setup, it creates a friendly and responsive environment where students can learn and showcase their skills in a free manner. This form of leadership is also useful

in driving the employees' innovative behaviour as students are offered an environment where motivation drives their thinking leading to innovative ideas. Bryman (2007) further added that transformational leadership might not always lead to innovative behaviour as behaviour and attributes is based on beliefs and thinking that differ in each individual. However, there is a possibility of generating innovative behaviour mainly because of the positive environment facilitated by the transformational leadership.

## **2.4 Innovative behaviour**

Novus is the Latin root of innovation, it defines also as new idea, method or device or the process of introducing something new (Gopalakrishnan and Damanpour, 1994). In the begging it was defined by the scholars as an outcome (Evanisko and Kimberly, 1983; Damanpour, 1991, 1992), then it was defined by the scholars as a process (Rogers, 1983; Cooper and Zmud, 1990). The definition of innovation is the successful implementation of creative ideas at the organizational level. However, the definition of creativity is the production of novels and useful ideas at the individual level (Amabile, T.M.; Conti, R.; Coon, H.; Lazenby, J; and Herron, M.,1996).

Afuah (2003) stated that a number of innovation theorists have described the innovation process consisting of two main phases in the form of initiation and implementation. The division between these two points can be assumed as a point at which the idea is initially adopted. The firsts age ends with the initiation or production of idea followed by the second stage that ends with the implementation of idea in a planned and judicious manner. Basadur (2004) further added that many studies have concentrated only on innovation being the stage of creativity and idea generation. However, innovation also leads to implementation of ideas and in this regard, innovative behaviour can be described as initiation and application of new and useful ideas, processes, procedures, and products in a systematic

way. Innovative behaviour can be further assumed as multi-dimensional capturing all behaviours through which individual can contribute in the innovation process (Janssen, 2003).

In this research, the focus is more on two core employees' innovative behaviour in the form of idea generation and idea implementation and both are very much related to the process of individual innovation. In order to be innovative, individuals need to be generating new ideas by engaging in innovative behaviours exploring new opportunities, identifying performance gaps, and producing solutions for problems. Shane (2003) added that in educational settings, students and teachers can think in an innovative manner in terms of dealing with educational challenges and generating solutions for educational complexities. This would help in enhancing the level of learning in a critical manner. There is no doubt that opportunities for generating innovative ideas and behaviours are based and driven by discontinuities and incongruities. This means that they didn't not fit the expected patterns, like problems related to learning mathematics, or dealing with second language learning. This means individuals with innovative behaviour and thinking will be successful in generating ideas and tools to deal with such issues. They might be successful in convincing others to use their solution in order to deal with the identified issue. Innovative behaviour is closely associated with the individual creativity (Yukl, 2002). Some researchers have proposed different models of creativity that pays great attention in terms of implementing creative ideas in a simple manner. Basadur (2004) distinguished between problem conceptualization and problem solving and also problem finding and solution implementation. Mumford (2003) added that the implementation of creative ideas needs to be analyzed and discussed in detail rather than just forming and using a theoretical overview. This will help in understanding the overall utility and purpose of innovative behaviour and creativity in different environments and settings.

There are arguments in relation to the difference between employees' innovative behaviour and creative as innovative behaviour is assumed to be more impactful in terms of intended at producing some kind of positive benefit and results. This also means that innovative behaviour has an applied component as it is estimated to result in innovative turnout. In this regard, creativity that can be assumed as a part of innovative behaviour (King and Anderson, 2002).

Creativity is obvious in the first phase of innovation process, where problems and issues are identified whereas ideas are generated in response to the need for innovation. This also means that creativity is also quite important in facilitating the innovative behaviour. The usefulness of innovative behaviour in educational setting is quite important, as students need to learn in a creative manner (Leonard, 2005). They also need to be supported and guided through effective leadership in order to form robust and consistent employees' innovative behaviour. Continuity in innovative behaviour is quite useful and promising in terms of shaping the overall learning. This can be done individually but in case of students, effective leadership in the form of transformational leaders can be assumed as quite beneficial and impactful in empowering the overall employees' innovative behaviour.

Several researchers have argued the significance of innovative behaviour to the individual effectiveness and survival (Scott and Bruce, 1994; Shalley, 1995; Oldham and Cummings, 1996; West et al., 2004). They stated that Innovative behaviour of individuals has great significance for their own effectiveness and survival that ultimately lead to sustainable individual progress. According to Noruzy et al., (2013), organizational innovation is mainly described as the ability of individuals to enhance their own ability and capability. For this, leaders try to build an innovative climate in different settings that help in guiding and defining principles for creative work processes. Individuals feel energetic and are able to think creatively with the help of the resources available. However, it has also been seen

in the research by Vaccaro, I.G.; Jansen, J.J.; Van Den Bosch; F.A., and Volberda, H.W., (2012) that innovative behaviour does not come only through leadership, it also comes from the help of external institutions such as financial and technical enterprises and the leaders should be well aware of the best technical and financial support present in the market to attain greater advantage in adapting innovation theory.

Hence, good expertise in training individuals and developing a whole new innovative climate internally is important, along with seeking the best help from the external sources that stimulate innovation and support the whole process. Overall, it can be said that employees' innovative behaviour is an ability that is based on understanding the problems and seeking solutions using the most creative ideas, strategies, and processes. The leadership role is quite significant as it plays a vital role in any organization; it helps in guiding and motivating individuals to be innovative through an effective personality and impactful words. Shin and Zhou (2003) further argued that there have been debates over which leadership style leads to innovative behaviour. Academicians supporting transformational leadership suggest that such leaders have unique and impressive personality that creates positive impression on followers. It also helps in being motivated by their personality that leads to an employees' innovative behaviour. However, Von Hippel (2005) disagreed by adding that there is no assurance on the fact that transformational leaders are always successful in facilitating the innovative behaviour among followers. Thus, this research holds great deal of significance in terms of ascertaining whether transformation leadership plays a positive and important role in enhancing the employees' innovative behaviour or not. The next section will present the relationship between transformational leadership and employees' innovative behaviour.

## **2.5 Transformational Leadership on employees' Innovative Behaviour**

It has been seen that there is a greater need or demand for every organization to undergo flexibility, changes, innovations, and be adaptive to the variation in demands of today's working environment. Leadership is arguably by several researchers as the highest important indicator of innovation behaviour (Jung et al., 2003). The leaders of an organization help define and shape work contexts that contribute to innovation of that organization (Amabile, 1998).

Crossan and Apaydin (2010) noted that, appropriate leadership styles have a major role to play in particular transformational leadership, which allows the people to evolve with the changing demands of work easily and comfortably. Such leadership develops intrinsic motivation that leads to creativity and thus creates innovation in the work environment. It is, thus, observed that innovation has a positive influence with the transformational leadership trait. Such leaders have the ability to encourage, follow the vision, provide support for accepting challenges and innovate accordingly, and thus they work as creative enhancing forces for their employees. They support exploratory thinking and new ideas that energies the innovation process. Also, the emotional bond that is created between the leader and the followers seems to be the reason for obeying and bringing more creativity and harder working to achieve the common goals (Pieterse et al., 2010).

It has been argued by many scholars that one of the most influential factors that promoting organizational innovation is transformational leadership (Bass, 1985; Basu & Green, 1997; Conger, 1999). However, the relationship knowledge between transformational leadership and employees' innovative behaviour remains underdeveloped. The relationship between transformational leadership and organizational innovation was not always the same (Basu & Green, 1997; Kahai, S.S.; Sosik, J.J.; and Avolio, B.J., 2003; Shin and Zhou, 2003). Thus, exploring the mediation factors between transformational and organizational innovations is significant. King & Anderson (2002) further added that in regards to

organizational settings, the impact of organizational culture, employees' work management, and employees' attitude toward change affect the employees' innovative behaviour to an extent. In addition, transformational leadership can play an important and crucial role in this regard. Shin and Zhou (2003) further pointed that organizational culture can clearly define the innovative behaviour of individuals as culture facilitates the actions and behaviour of people in a significant manner. When an organizational culture is supported by a robust transformational leadership, there is always a chance for innovative behaviour and reactions from the employees. However, this again is dependent on the attributes of the leader and beliefs and actions of followers that might differ in different settings. Mumford (2003) further added that employees' work management can play an important and crucial part in defining the innovative behaviour. If employees' work is managed in an innovative manner with guidance and feedback by a transformational leader offering freedom to think differently in terms of dealing with a problem, there is always a chance of showing an employees' innovative behaviour. However, this hypothesis needs to be further tested, as there are not many evidences supporting the same. Finally, attitude toward the change can also affect the employees' innovative behaviour even though there is transformational leadership in practice.

If employees are not willing to change or embrace new ways to dealing with issues and problems, there are high chances of showing little or no innovative behaviour. Overall, all these factors in the form of transformational leadership, employees' innovative behaviour, organizational settings, the impact of organizational culture, employees' work management, and attitude toward change have been the basic foundation of the proposed hypotheses that have been discussed in the following sections. The first hypothesis in this regard is in the form of:

***Hypothesis 1: Transformational leadership is positively associated with Employees innovative behaviour***

The previous section has detailed a number of findings and arguments in relation to Transformational leadership is positively associated with employees' innovative behaviour. Further underpinning helped in forming the proposed hypothesis in a clear and precise manner based on the following premises. A number of studies have been implemented in terms of understanding the relationship between Transformational leadership and positive effect on the innovative behaviour of employees.

Kahai et al., (2003) argued that transformational leadership encourages creativity that leads to innovative behaviour in the short as well as in the long run. Shin and Zhou (2003) also supported this hypothesis by adding that transformational leaders motivate the followers to view issues in a different manner that is generally based on creativity and innovation that help them realize their true value and importance. This in turn helps in adding employees' innovative behaviour to their personality. However, there are also mixed studies were also found that the impact of transformational leadership on the creativity of students was not visible to a great degree (Kahai et al., 2003). Transformational leadership style has been found that is has marginal or little influence for the creativity of the employees when a study conducted by Jaussi (2003). Thus, there are agreements as well as disagreements in regards to transformational leadership is positively associated with employees' innovative behaviour. This further needs to be tested in order to reach towards an agreement that will either help in accepting or rejecting this hypothesis in a critical manner.

**2.6 Transformational leadership on organizational culture**

According to Maslowski (2001). Organizational culture is described as a shared philosophies, ideologies, values, assumptions, beliefs, expectations, attitudes and norms in

organizations. Organizational culture is a set of rules, principles and behavioural standards of people in an organization and only a good leader is able to predict changes in the environment and build strong interpersonal relations with his followers in order to adapt and grow with the desired changes. Culture can be viewed as the deep structure of the organizations in which it rooted to the values, beliefs, and assumptions held by the members of the organizations (Denison, 1996). Also, Culture can be explained as the normative beliefs and shared behavioural expectations in an organization (James, L. R.; Choi, C. C.; Ko, C.-H. E.; McNeil, P. K.; Minton, M. K.; Wright, M. A., et al., 2007). To that, organizational culture is in built in organization's protocols, actions, and procedure setup. organizational culture can also be viewed as a sustained competitive advantage (Miron, E.; Erez, M.; & Naheh, E., 2004). Several scholars in the relation of organizational culture and leadership argued that leaders are in a position to shape organizational culture of the organization (Schein, 1992; Denison and Mishra, 1995). This demonstrated that leaders are the architects of culture change as the functionalist school claimed (Schein, 1992; Beyer, 1993). They believe that leaders can play that role either through the symbolic role leaders play or through the substantive visible actions they do (Meindl et al., 1985). On the other have, the other scholars of the anthropological school view leaders as part of the organizational culture and not a part from it (Smircich, 1993; Meek, 1988). However, most scholars are more towards those leaders are the architects of culture change as the functionalist school and are in a position to shape the organization's culture (Schein, 1992; Denison and Mishra, 1995). Thus, according to Nam Nguyen and Mohamed (2011), only a powerful leader can manage to cope with challenges and foster his followers to progress in achieving productivity and vision for the organization. Leaders must articulate the change that the organization required, for the organization to become more

transformational, the behaviors of the top-level leaders become the organization's new culture symbols (Bass, 1999).

Transformational leaders are the type of leadership needed to change culture since culture change needs commitment to achieve outcomes and enormous energy. It has been seen that transformational leaders are able to connect to their followers in a very influential manner and thus they build a very healthy, supportive and creative culture in the workplace that is favorable for organizational goals as well as employees' personal interests and motives. For this, leaders are important in building up the morale and motivational level of their employees for which various incentive programs are used and lot of encouragement is needed. All this directly affects the level of workforce performance and relationship that the members share with each other and with their organization.

Since the decision maker is the leader himself, the organizational culture is either transactional or transformational and the employees behave accordingly forming strong or weak cultures. Level of participation, satisfaction of the workforce, psychological support, decision-making authority, availability of resources for challenges and overall love and care for the organization are all important factors for the employees to achieve a strong organizational culture. For this, leaders should be empathetic, well aware, persuasive in nature, communicative, ability to foresee and visionary to help build a healthy working environment (Schein, 2010). The adoption of transformational leadership allows the creation of an ethical climate in the organization, which benefits employees in sharing values. It also emphasizes an increasing awareness and building of moral standards in organizations, which develop positive attitude in employees towards change (James-Parks, 2015). The application of transformational leadership in higher education allows developing confidence in the employees by giving them autonomy. When staff members are involved in problem solving and change, it boosts their morale, as they feel recognized

in the institutes. Besides this, it also leads toward commitment as the staff members become dedicated towards the organization and keenly contribute to ensuring the company's success (Al-Omari, 2006).

The major benefits gained by applying transformational leadership in the institutions of higher education is that allows enhancement of the careers of a higher education professional because of additional responsibilities assigned to them. As mentioned by Al-Adwan and Smedley (2012), the transformational leadership strategy followed by higher educational institutions may help them to develop unique capabilities in educational professionals and it leads towards the success of institution. However, such instances require great deal of support and cooperation from leaders. If leaders are supportive and cooperative in creating and initiating a change in the culture, beliefs, ideologies, perceptions, and mindsets of followers through a learning and cooperative culture, there is every possibility of creating long term value in a significant manner. As mentioned above Transformational leadership plays a significant part in facilitating the organizational culture. However, such role might be positive, negative, or neutral in nature dependent on the way leadership is exhibited. James et al., (2007) added that organizational culture is deeply affected by the leadership styles, and approaches, and the transformational leadership style has highly impactful and useful in shaping different organizational cultures in different industries.

***Hypothesis 2: transformational leadership is positively associated with organizational culture***

Edwards (2001) further added that every organization has different culture that is shaped by the beliefs, values, ideologies, and thinking of the leaders as well as followers. This also means that the culture is driven by the leadership approach that is exhibited through wide arrays of attributes in a planned manner. Giessner (2011) further argued that leaders can

have positive or negative influence on the organizational culture. Several numbers of studies have highlighted the positive effects of transformational leadership on organizational culture.

Greenhalgh, T.; Robert, G.; MacFarlane, F.; Bate, P.; & Kyriakidou, O., (2004) added that transformational leaders often help in creating a positive environment for employees that helps in extracting the best out of them. This results into a robust and positive organizational culture helping in creating positive values. Heuvel (2009) further added that if leaders are not having an appealing personality and expertise, there is little chance of transforming others and leading by examples. Such transformational leadership will deter the positive performance of employees along with making them demotivated. Therefore, it can be assumed that transformational leadership might create positive or negative impact on employee's dependent on the attributes and ideologies of leaders that have significant impact on followers.

A positive or negative organizational culture is based on the kind of environment that is created by leaders. Even though, a number of research works has been conducted in regards to the influence of transformational leadership on organizational culture, there are many showcasing the positive impact rather than exploring the negative outcomes and impacts. In regards to such notions, it is hard to ascertain whether the influence of transformational leadership is positive or negative on organizational culture. This is why, it is important to test this hypothesis in a critical manner that will help in ascertaining the negative or positive impact in an illustrative manner.

### **2.7 Organizational culture on employees' innovative behaviour**

The influence and importance of organizational culture on employees' innovative behaviour has been argued among several scholars in the literature, organizational culture

considers as a stimulant for innovation as many scholars stated (Mumford, 2000; Lau and Ngo, 2004; Carmeli, 2005; Hartmann, 2006; Chang and Lee, 2007). According to Carmeli (2005), it may lead employees to accept innovation as a fundamental value of the organization and to feel more involved in the business. Organizational culture is considered today as one of the variables that have a significant influence on innovation (Hartmann, 2006). Organizational culture is one of the factors that can stimulate among the member of the organization the most of an innovative behaviour (Mumford, 2000). Organizational culture is a facet of operational competency that is shaped by the innovative orientation of the organization (Siguaw, J.; Simpson, P.M.; and Enz, C.A., 2006). Organizational culture is a clear determination of innovation strategy, it fosters strategies and promote imitation culture (Julia C. Naranjo; Valencia, Daniel Jiménez; and Jiménez, Raquel Sanz Valle., 2011).

Jacobs, G.; Witteloostuijn; van, A.; & Christe-Zeyse, J., (2013) identified that organizational culture is based on the beliefs and values shared by different people working within the organization. These values and beliefs are often helpful in defining a culture that becomes a thinking and common approach in dealing with issues and problems. In last few years, there have been a number of companies that have transformed their organizational culture which has helped in adding innovative value to the employees and organizations. Lee, D.; Rhee, Y.; & Dunham, R. B., (2009) stated that companies like Google have incorporated an open culture where employees can share their views and ideas in an open manner. On the other hand, companies like Facebook have also deployed an open culture where everyone sits together without any hierarchical differences that leads to sharing and exchanging of ideas in an open and transparent manner.

***Hypothesis 3: Organizational culture is positively associated with employees' innovative behaviour***

Marcati, A.; Guido, G.; & Peluso, A. M., (2008) further added that organizational culture is positively associated with employees' innovative behaviour. However, this is mainly because of the positive leadership approach that led to such culture. A number of academicians further argued that employees' innovative behaviour is based on abilities and capabilities that differ in each employee. This also means that employees' innovative behaviour might not be purely dependent on the organizational culture but on a number of other factors like personal skills, attributes, motivation, thinking, logical approach, and learning from others with an openminded and approach. This also means that only organizational culture is not responsible for employees' positive innovative behaviour. This is mainly because of the fact that organizational culture is dependent on a number of factors that further shape the thinking and behaviour of individuals leading to innovative behaviour. Mc Connell (2010) further argued that organizational culture and innovative behaviour might be closely linked but the results might not be always positive.

This is mainly because of the fact that employees' innovative behaviour is the outcome of motivation and rationale thinking that is supported and guided by knowledge and information. This also trigger that employees' innovative behaviour might be a dependent variable dependent on a number of other variables like knowledge, thinking, guidance, and support of others. Thus, saying that only organizational culture plays an important and crucial role of positive employees' innovative behaviour can be quite tricky as it can be vice versa requiring further underpinning. However, findings from previous research works do support the role of organizational culture on positive employees' innovative behaviour. As mentioned above organizational culture plays a significant part in facilitating the innovation stem of the company. An open culture creates commitment among employees during change and it successfully leads to innovation. This also needs further testing to reach towards a conclusion (Mueller, 2000).

## **2.8 Organizational culture meditation**

Oreg (2003) quantified that the culture can be defined as an implementation of the attitude that acts a fusion between value-oriented companies for achieving corporate goals. The organizational culture can be assumed as a system that has every potential of affecting and shaping the behaviour of employees. This similarly means that behaviour can be either positive or negative leading to innovative, progressive, or regressive behaviour in the short and long run. A good organizational culture is always valuable in terms of motivating employees to achieve a common task and objective.

In many cases, a good organizational culture might lead to innovative behaviour in employees that might lead to positive and enhanced value creation process. This again means that organizational culture might lead to creativity that is always a sub part of innovation helping in creating innovative values and outcomes. Oreg, S.; Vakola, M.; & Armenakis, A., (2011) mentioned that a strong organizational culture is based on an open and transparent environment where employees and leaders are free to share their views and opinions without any issue or compulsion. This makes them free in terms of thinking in a creative and free manner that is always fruitful in terms of being innovative and contributing in the success of organizations.

This clearly shows that organizational culture can positively contribute in terms of enhancing the innovative behaviour of employees in a systematic manner. Robbins and Judge (2007) further found that a strong organizational culture might not lead to innovative behaviour in all employees, as there might be a difference in opinions and acceptance of the same. This is where; organizational culture acts as a limitation in terms of facilitating an innovative behaviour. However, there might be other factors that help in strengthening

the relationship between organizational culture and employees' innovative behaviour in a significant and positive way

***Hypothesis 4: Organizational culture mediates the relationship between transformational leadership and employees' innovative behaviour***

Svensen, E.; Neset, G.; & Eriksen, H. R., (2007) further added that transformational leadership might lead to positive innovative behaviour among employees but the same needs to be tested, as there can be positive as well as negative influences. This hypothesis has been explained and discussed in the previous sections in an illustrative manner. The focus area of this hypothesis to find out the role of organizational culture in mediating the relationship between transformational leadership and employees' innovative behaviour. Lee et al., (2009) argued that organizational culture is driven and created by leadership and transformational leadership has the potential to create a strong organizational culture. On the other hand, innovative behaviour can also be developed through a strong organizational culture. This means both transformational leadership and employees' innovative behaviour can create strong organizational culture that can further benefits these two variables.

Oreg (2003) pointed that organizational culture has the potential to strengthen the transformational leadership and employees' innovative behaviour as both play an important and active role in defining the organizational culture. However, organizational culture can also affect the leadership if followers or employees are not willing to follow the leaders and their words. Organizational culture can further affect the employees' innovative behaviour if employees are unwilling to be creative and adamant on showing resistance towards the change. This means that there are both the possibilities of mediating the relationship between transformational leadership and employees' innovative behaviour in both positive or negative manner. This is why, it is important to test this hypothesis as early research works and opinions have both the notions and findings. This will further

help in reaching toward a specific and justified conclusion towards the role of organizational culture in transformational leadership and employees' innovative behaviour.

## **2.9 Transformational leadership on employees' work engagement**

The work engagement was defined by many scholars over the past time. Work engagement was defined on the based on the individuals physical, cognitive, and emotional connections with the individuals' work tasks. The key reference of engagement as per this definition is the work role as argues by Kahn (1990). He conceptualized engagement as the "harnessing of organization member's selves to their work roles: in engagement, people employ and express themselves physically, cognitively, emotionally and mentally during role performances" (p. 694). Other scholars define work engagement as a two-dimensional construct that includes attention and absorption, they consider engagement as the positive antithesis of tension in the work itself or individuals work activity (Rothbard, 2001). However, the most cited work engagement definition that defines work engagement as a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption (Schaufeli, W.B.; Salanova, M.; González-Romá, V.; and Bakker, A.B., 2002). The three characteristics is referred as a component of physics, emotion, and cognition, where vigor as a high level of energy and psychological resilience whilst working, dedication as a sense of motivation, enthusiasm, and challenge, and absorption as completely concentrated and opposed to ending the work (May et al., 2004). Thus, we can define and characterize work engagement by a high level of energy and enthusiasm with a strong work identification unlike disengagement whereas we can define and characterize it by a low level of energy and enthusiasm with poor work identification (Bakker and Demerouti, 2008).

Absorption was also included as a third component of the work engagement after an on-depth interviews conducted many scholars (Schaufeli et al., 2002). However, other scholars doubted that absorption could be also included as a third component of the work engagement, they suggested that a further researches and studies should examine whether absorption is also included as a third component of the work engagement or it's a consequence of vigor and dedication (Gonzalez-Roma, V.; Schaufeli, W. B.; Bakker, A. B.; and Lloret, S., 2006 Bakker, A. B.; Albrecht, S. L.; and Leiter, M. P., 2011). In modern organizations employees are expected to be engaged in their work, they should show initiative, and be innovative to achieve employees' work engagement. Meanwhile, organizations should arrange working conditions with satisfactory motivation and energizing resources (Schaufeli and Salanova, 2006). As mentioned by Nam Nguyen and Mohamed, (2011), work engagement is referred as a positive feeling of the employee to fulfil his/her work on given timeline. The work engagement creates a significant impact on the overall employee productivity as it motivates them to achieve stretch targets. The work engagement allows the organization to retain their employees and it reduces the burnout problems in the organization (Vaccaro et al., 2012).

The leadership behaviour of any organization plays a vital role on the employee's behaviour. Transformational leadership is the leader's behaviour which transformed the norm and values of the employees and motivate them to perform beyond their expectations (Yukl, 1989). Transformational leadership style focuses on the enhancing the employee's involvement with the organizational goals (Bass, 1985). The application of transformational leadership style allows the leader to involve the workforce in decision-making, which allows reducing the burnout. This is because the employee feels involved and engaged in the organization and it enhances their recognition level. Furthermore, it

also allows employees to accept changes in the organization as they make decisions by interacting with the leaders (Dumdum et al., 2013).

***Hypothesis 5: Transformational leadership is positively associated with employees' work engagement***

Regarding testing the hypothesis mentioned above, the biggest motivation is in regards to the role of transformational leaders who are capable of engaging employees along with ability in motivating them in the right direction. Sykes, T. A.; Venkatesh, V.; & Gosain, S. (2009). found that transformational leaders are quite aware of their role and often use their personality and influence to shape the behaviour and to think of their followers. Transformational leaders are different from other leaders as they showcase examples and lead from the front. They are also capable of engaging their followers in their communication and thought the process that plays an important role in adding value to their thinking and behaviour. It needs to be mentioned that employees are engaged in their work only when they are motivated to complete their work.

This also means that the source of motivation can be many regarding engaging employees in the form of rewards, awards, financial incentives, positive communication and organizational culture, able and qualified leaders, and most importantly freedom to be innovative in thinking and acting. All these factors are quite important, but above all, transformational leadership has an important role to play regarding motivating employees, guiding them, believing in them, and pushing to work innovatively regarding achieving the common tasks and objectives. Some academicians believed that effective transformational leadership has the potential to engage employees in their work and tasks (Vakola, 2005). However, transformational leadership is also dependent on some factors and because only transformational leadership can play an active and positive role in employees' engagement can be a false assumption. In this regard, it is important to make sure; this hypothesis is

tested critically to ascertain the major or minor role of transformational leadership in employees' work engagement.

The contemporary organizations are guided by competition and technology and work in the state of variability and experience regular changes at large scales; henceforth they need to be guided by the visionary leaders to be successful. The most important aspect is augmentation of work engagement in any organization as this aspect is equally beneficial for the employees who are experiencing the same. Moreover, as the leaders are responsible for the productivity their attitude greatly influences employees; the right attitude of leaders result in motivated employees who in turn like to be engaged in their task which in the modern times requires lots of introspection as it changes with the demand of market and technology (Koppula, 2008)

Additionally, the conventional leadership's methods cannot be employed in the modern times, so the team of researchers headed by behavioural scientists are seeking into new set of modalities which might increase the level of commitment of employees and help in infusing enthusiasm in them. The organizations of the modern times require transformational leaders who can develop enthusiasm and commitment in employees by adopting behavioural aspects in their character like charisma, so that they can convey their vision to the employees to attain ever increasing targets in the competitive modern time (Al-Sewidi, A.; Nawawi, M.; and Al-hosam, A., 2010). These leaders as per Bakker (2009) encourage employees to achieve organizational goals by providing them better services and solving their social nuisances and prepare them for the upcoming challenges and perpetually appreciate the talent in their employees and provide them with a sense of identification which increases their competency and they become enthusiastic. It's this enthusiasm which is significant to enhance the employees' work engagement and the transformational leaders perpetually convey this enthusiasm and power to their employees

by posing themselves as “prototype”. This increases the zeal in employees and the augmented power acts as a motivational factor for work engagement in employee Bakker (2009).

Fundamentally, the “idealized” inspiration of the transformational leaders help in developing trust towards employees and this trust helps the leaders to inspire and motivate the employees. This helps in providing positive vision to the organization and increases the standards of the organization and they become equipped to face challenges and thus the zeal towards working increases and great optimism can be felt at the work place to attain success and results in tremendous increased in the work engagement (Bakker, A.; Hakanen, J.; Demerouti, E.; & Xanthopoulou, D. 2007). Furthermore, it has also been researched that the everyday variations in the style of governance of the transformational leaders as per the requirement of the market and the work place results in influencing the work engagement. This increased work engagement can be attributed to high level of optimism and enthusiasm of transformational leaders who change and adapt with the modern times (Schaufeli & Bakker, 2010).

### **2.10 Employees’ work engagement on employees’ innovative behaviour**

We can define and characterize work engagement by a high level of energy and enthusiasm with a strong work identification unlike disengagement whereas we can define and characterize it by a low level of energy and enthusiasm with poor work identification (Bakker and Demerouti, 2008). In modern organizations employees are expected to be engaged in their work, they should show initiative, and be innovative to achieve employees’ work engagement. Meanwhile, organizations should arrange working conditions with satisfactory motivation and energizing resources (Schaufeli and Salanova, 2006).

Organizations today need more than anything else an employee who are engage in the employees' innovative behaviour in addition to fulfilling their formal job requirements, the employees' innovative behaviour can be described as initiation and application of ideas; procedures; processes; and products in methodical manner. Employees' innovative behaviour can be further assumed as multi-dimensional capturing all behaviours through which individual can contribute in the innovation process. It's the intentional creation of new ideas within a work group or organization, to benefit the group or the organization (Janssen, 2000, 2003). The importance of employees' innovative behaviour to the effectiveness of the organizations has been argued by many scholars over the years, they argued that the employee's innovative behaviour has a great importance for the survival and effectiveness of the organization that eventually lead to sustain the organizational development (Scott and Bruce, 1994; Shalley, 1995; Oldham and Cummings, 1996; West et al., 2004).

For organizations to be more innovative, they should inspire the employees to be more innovative. As innovation emerged to become a crucial survival factor for organization, they are working hard to increasingly interested to examine factors that can boost the innovative work behaviour for their employees. This idea that innovation by individual employees leads to fostering organizational success was endorsed by many scholars (e.g., Van de Ven, 19986; Smith, 2002). Some scholars argued that the long-term survival of organizations is the central role of innovation (Upasna, 2014). This continued interest in innovative behaviour studies is still developing among scholars of social scientist in many aspects. However, few efforts have been made to innovative behaviour and work engagement (Hakanen, J.J.; Schaufeli, W.B; and Ahola, K., 2008; Agarwal, U.A.; Datta, S.; Blake-Beard, S.; and Bhargava, S., 2012).

Huhtala and Parzefall, (2007), concluded at their study to develop a conceptual framework for understanding the relationship between employee well-being and innovativeness that employee innovativeness is negatively influenced by burnout and likely to occur when employees are engaged in their work. Edwards (2001) identified that employees' work engagement is based and driven by some personal and professional factors. If employee work engagement is driven by pressure and challenging tasks, there is every possibility of embracing a safe way to deal with the work engagement and pressure rather than trying innovative and creative ideas.

Mueller (2000) contradicted by adding that, at times creativity and innovation in thinking can help in relieving the work pressure and thus enhancing the work engagement of employees in a critical manner. employees' Innovative behaviour is an attribute that is shaped by multiple factors including demographic, personal, social, and professional factors. No single factor is responsible for innovative behaviour in employees. Although, transformational leadership and personal skills are often credited to enhancing the employees' innovative behaviour. They are not the only factors that lead to such behaviour in employees in the short and long run.

***Hypothesis 6: Employees' work engagement is positively associated with employees' innovative behaviour***

Employees' work engagement is a positive and fulfilling state of mind that is related to work being driven and defined by the high amount of dedication and energy. There is no doubt that employees' work engagement is highly researched subject and some scholars in the field of business, psychology, human resource management, and organizational development have paid significant attention to the notion of employees' work engagement (Giessner, 2011)

This is mainly because employees' work engagement is considered as a favorable way towards enhancing the value and significance of any business. This is mainly because employee work engagement makes a positive contribution to any business in the short and long run. However, there is very little clarity over the fact that employees' work engagement always leads to employees' innovative behaviour. This is because work engagement might lead to the better creation of operational and financial value to fulfilling organizational goals and objectives but there is no assurance on the fact that, such goals are achieved through innovative ideas and approaches (Jacobs et al., 2013).

However, there is a possibility that employees' work engagement might lead to positive, employees' innovative behaviour because employees are motivated and dedicated to their approach along with having the zeal to perform well using innovative ideas and thinking. They might not always use innovative ideas while engaged in their work and still leading to the better degree of value creation. Thus, there are possibilities of work engagement might not be positively associated with the employees' innovative behaviour and this way, the proposed hypothesis needs to be tested critically for further clarity (Oreg, 2003). This will also help in understanding the role of employees' work engagement in showcasing innovative behaviour or only professional and expected behaviour within the organizational settings.

### **2.11 Employees' work engagement mediation**

There is no doubt that employees' work engagement is a significant aspect of organizational value creation process. This is mainly because employees' work engagement leads to customer loyalty as they perform their tasks and responsibilities in a dedicated manner. This leads to a dedicated and motivated work environment where employees are not only engaged in their work but also helping in creating multiple values

for organizations. On the other hand, employees' work engagement is not dependent on their motivation and dedication level but other factors like leadership and innovation. Sykes et al., (2009) mentioned that transformational leadership is an effective tool that creates such dedicated and motivated environment along with guiding employees in the right direction through words and actions. When employees are dedicated and motivated along with being guided, they tend to be relaxed in their approach that leads to creativity.

This stage can be assumed as quite critical as it leads to innovation stage that is important in showcasing innovative behaviour. Robbins and Judge (2007) further added that a creative employee will always be innovative in his work and behaviour while a least motivated employee will always fulfil his general task and responsibilities as and when stated without showing any creativity or innovation. An engaged employee requires great support from organizations to be innovative and creative and until, and unless that support is offered, there are little chances of highlighting the innovative behaviour in the long run. Some academicians believe that work engagement cannot define transformational leadership rather it is the other way around. This is mainly because leaders can help in enhancing the engagement of workers in the most innovative manner rather than employees; work engagement guiding the transformational leadership (Marcati et al., 2008).

***Hypothesis 7: Employees work engagement positively mediate relationship between transformational leadership and employee's innovative behaviour***

In modern organizations employees are expected to be engaged in their work, they should show initiative, and be innovative to achieve work engagement. Meanwhile, organizations should arrange working conditions with satisfactory motivation and energizing resources (Schaufeli and Salanova, 2006). As mentioned by Nam Nguyen and Mohamed (2011), work engagement is referred as a positive feeling of the employee to fulfil his/her work on

given timeline. The work engagement creates a significant impact on the overall employee productivity as it motivates them to achieve stretch targets. The work engagement allows the organization to retain their employees and it reduces the burnout problems in the organization (Vaccaro et al., 2012).

The application of transformational leadership style permits the leader to involve the workforce in decision-making, which allows reducing the burnout. This is because the employee feels involved and engaged in the organization and it enhances their recognition level. Furthermore, it also allows employees to accept changes in the organization as they make decisions by interacting with the leaders (Dumdum et al., 2013). Hence, the transformational leadership style adopted by leaders enables work engagement in an employee, and it enhances the innovation and creativity in the organization (Avolio and Yammarino, 2013).

The mediating model is establishing the relationship between the predictor and the outcome variable whereby the outcome variable can be clarified by the third variable (Baron and Kenny, 1986). The above discussion is meant to explain the direct and indirect relationship between transformational leadership and employees' work engagement, in addition to explain the direct and indirect relationship between employees' work engagement and employees' innovative behaviour.

### **2.12 Transformational leadership on employees' attitude toward change**

Employees' attitude toward change is considered as part of the organization's employees' behaviour, the center of the organizational change is the employees (Tetenbaum, 1998). The organizations act and change through their employees, the success of the change will continue for over a long time when members modify on-the-job behaviour in an appropriate way. Alternatively, many scholars argued that because leaders often underestimate the

center role employees play in the change process, many change efforts fail (George and Jones, 2001; Greenhalgh et al., 2004). Therefore, organizations must depend on their employee's cooperation to realize intended change (Porras and Robertson, 1992). However, employees' traditional resistance to change has been researched by many scholars. Oreg (2006) has reviewed the literature on employee's acceptance or resistance to change within the organization and identified that one key to determine if the employees will accept or resist the change is trust in Management.

The other six key context-specifics as argued by many scholars over the past years can be predisposed by the organizational overriding leadership role. They are firstly the job security as stated by Probst (2003), the second key is employees' anticipated change outcomes as mentioned by Dent and Goldberg (1999), the third key is the power and prestige as suggested by Goltz and Hietapelto, (2002), the fourth key is information as described by Kotter and Schlesinger, (1979), the fifth key is the intrinsic rewards as job autonomy as concluded by Hackman and Oldham (1976), or individuals' well-being as concluded by Ryan and Deci (2000), and the sixth key is the social influence as argued by (Gibbons, 2004). According to Crossan and Apaydin (2010), the appropriate leadership styles have a major role to play, in particular, transformational leadership, which allows the people to evolve with the changing demands of work easily and comfortably.

Transformational leadership could be particularly important in influencing employees' attitude toward change and leading organization through significant change as transformational leadership transmits a sense of mission, stimulates employees' learning experience, and creates new ways of thinking, transformational leadership holds a big performance responsibility (Bass, 1990). Transformational leadership theory has been defined explicitly around the concept of change (Bommer, W.H.; Rich, G.A.; and Rubin, R.S., 2005). The adoption of transformational leadership allows creating an ethical climate

in the organization, which benefits employees in sharing values and they show a positive employees' attitude toward change. It also emphasizes on increasing the awareness and moral standards in organizations, which develop positive attitude in employees towards change (James-Parks, 2015).

Transformational leadership has a positive impact on integrating information communication technology into teaching on the ability of schools (Leng, 2008). In Educational context, the application of transformational leadership in higher education allows developing confidence in the employees by providing them autonomy, which makes them proactive towards change. For instance, when the staff members are involved in problem-solving and change then it boosts their morale as they feel recognized in the organization. In this way, they prefer to contribute in the change process as they show their readiness towards change. Likewise, it also leads toward commitment as the staff becomes dedicated towards the organization and keenly contributes to ensuring the organization's success (Al-Omari, 2006).

The major benefits gained by applying transformational leadership in higher education institute is that it allows enhancing the career of a higher education professional because of additional responsibilities assigned to them.

***Hypothesis 8: Transformational leadership is positively associated with employees' attitude toward change***

As mentioned by Al-Adwan and Smedley (2012), the transformational leadership strategy followed by higher educational institutes may help them to develop unique capabilities in an educational professional, and it leads towards the success of the organization.

Many studies discussed and discovered evidences of the relationship between attitude toward change and transformational leadership. Transformation leadership style is confirmed to be associated with higher levels of change commitment along with good

change management practice (Herold, D. M.; Fedor, D. B.; & Caldwell, S. D., 2007). A greater readiness for change of employees is positively correlated with their perceptions of the ability of change leaders (Bouckennooghe, D.; Devos, G.; & Van Den Broeck, H., 2009). Transformation leadership style can reduce cynicism toward change (Bommer et al., 2005). However, there is also a possibility of transformational leadership not changing the attitude of employees. This happens when employees are rigid and adamant in their approach of working. This approach and attitude are formed on perceptions and beliefs that are hard to challenge and change. In such cases, transformational leaders will be having an insignificant impact on employees' attitude toward change. Employees' attitude toward change is a broad subject and attitude is driven by perceptions, values, beliefs, ideologies, and assumptions that can be changed or modified only when people are willing to drive a change (Vakola, 2005).

In conclusion, the relationship between transformational leadership with employees' attitude toward change is confirmed with existing evidence as demonstrated above. Transformational leadership is likely to positively associated with employees' attitude toward change. However, transformational leadership might not affect the positive employees' attitude toward change, and this is why the hypothesis has been proposed to be tested for further clarity.

### **2.13 Employees' attitude toward changes on employees' innovative behaviour**

Transformation leadership style is confirmed to be associated with higher levels of change commitment along with good change management practice (Herold et al., 2007). A greater readiness for change of employees is positively correlated with their perceptions of the ability of change leaders (Bouckennooghe et al., 2009). The commitment towards change has been and curial element of the behaviour intention to support change, it was developed

as an individual construct level (Fedor, D. B.; Caldwell, S.; & Herold, D. M.,2006). Transformation leadership style as an environmental factor use influence on change-relevant behaviour such as innovation behaviour through commitment to change. Therefore, employees with high level of commitment to change are more likely to exhibit innovation implementation behaviour, whereas commitment to change can be described as a mindset that binds an individual to a course of action deemed necessary for successful implementation of change initiative (Herscovitch and Meyer, 2002).

The open culture creates commitment among employees during the change, and it successfully leads towards innovation. The influence and importance of attitude on employees' innovative behaviour have been argued among several scholars in the literature. Therefore, the employees' attitude toward change can be positively considered as an influencer on innovated behaviour. As mentioned above, and based on the existing evidence, attitude toward change is likely to positively associated with innovative behaviour. Jacobs et al., (2013) further added that attitude toward change might not be an influential factor related to innovative behaviour. Therefore, the researcher proposes the hypothesis as follows.

***Hypothesis 9: Employees' attitude toward change is positively associated with employees' innovative behaviour***

Lee et al., (2009) stated that attitude toward change is mainly dependent on personality traits and each has different personality traits. This also means that employees' attitude toward change will never be similar to each in different environments. However, in regards to organizational settings, it needs to be mentioned that employees' attitude toward change is based on benefits and value being received in turn. At times, employees are reluctant towards change but still accept the change to survive in the environment. Oreg (2003) further added that employees in such cases do not exhibit a high level of innovative

behaviour as they accept the change based on the pressure created by their organizations. There are also other factors in the form of social influence and organizational pressure. When a change is beneficial for employees and also for organizations, there are little chances for reluctance towards accepting the change, and there is also a possibility of showing innovative thinking and behaviour.

However, if the change is not beneficial for the individual and organization, there is the low possibility of accepting the change and showcasing innovative behaviour. Thus, there is no doubt that employees' attitude toward change is quite useful and important in determining whether it will lead to an innovative behaviour or not. Giessner (2011) further added that attitude toward change is a dependent variable that might lead to a wide array of outcomes and innovative behaviour might be one of them. However, there is no assurance or surety on the fact that it will always lead to an employees' innovative behaviour. Even though previous research works have found a positive relationship on this hypothesis; it can be further tested as employees' attitude toward change might leads to different behaviours. Thus, this hypothesis needs to be tested on the ground that attitude toward change is positively associated with the employees' innovative behaviour that might or might not be true considering the influence of other factors.

#### **2.14 Employees' attitude toward change mediation**

Transformation leadership style is confirmed to be associated with higher levels of change commitment along with good change management practice (Herold et al., 2007). A greater readiness for change of employees is positively correlated with their perceptions of the ability of change leaders (Bouckennooghe et al., 2009). The commitment towards change has been and curial element of the behaviour intention to support change, it was developed as an individual construct level (Fedor et al., 2006). Transformation leadership style as an

environmental factor use influence on change-relevant behaviour such as innovation behaviour through commitment to change. Therefore, employees with high level of commitment to change are more likely to exhibit innovation implementation behaviour, whereas commitment to change can be described as a mindset that binds an individual to a course of action deemed necessary for successful implementation of change initiative (Herscovitch and Meyer, 2002).

Transformational leadership has been defending around the concept of change (Bommer et al., 2005). Transformational leadership can be conceptualized in five sets of behaviour; the first behaviour is challenging the process, which is clear in the behaviour of the leader that focus on looking in finding ways to help both the organization and the employees to change, grow, and improve, in addition to taking risks, and willingness to learn from mistakes; the second behaviour is inspiring a shared vision, where leader facilitate the creating of exciting and full of possibilities vision and craving the employees to support it; the third behaviour of the leader is enabling others to take action and act by encouraging the employees by fostering collaboration and providing decision-making opportunities; the fourth behaviour is modelling the way, where leaders' behaviour is aligns with their principles and values; the fifth behaviour is encouraging the heart, were leaders unveiled while recognizing employees' contraptions in addition to the ways they find to celebrate victories (Posner and Kouzes, 1995).

***Hypothesis 10: Employees' attitude toward change mediates the relationship between transformational leadership and employees' innovative behaviour***

The mediating model is establishing the relationship between the predictor and the outcome variable whereby the outcome variable can be clarified by the third variable (Baron and Kenny, 1986). Leadership is associated with both the organization and the employee's performance and attitude. Therefore, leadership is questioned and valued over employees'

innovative behaviour, work engagement, service quality, perceptions, attitude toward change, in addition to several behaviours and attitudes. Employee's attitude is never constant and keep changing as per the impact and influence of a wide array of factors (Jacobs et al., 2013). Transformation leadership can influence employees' attitudes by inspiring acceptance of innovation through the development of trust, openness, and enthusiasm. This style of transformational leadership creates vision and inspires followers to endeavor beyond required expectations, unlike the transactional leadership that focuses on extrinsic motivation for performance of job tasks (Jung, 2001). This also means that the impact of transformational leadership on employees' innovative behaviour is somehow mediated by the attitude of employees. Transformational leadership is quite important in pushing employees to exhibit behaviour that can be innovative. This behaviour is based on the attitude of employees regarding accepting the transformational leadership and facilitating the employees' innovative behaviour. However, the attitude of employees might not be the only factor that leads can mediate the relationship between transformational leadership and employees' innovative behaviour. There might be some other factors that can mediate such relationship in the form of beliefs and perceptions. However, attitude is shaped by beliefs and perceptions and can be assumed, as a key factor in mediating the relationship between end number of variables and this is why this hypothesis needs to be tested critically.

## **2.15 Jordanian Higher Education Context**

### **2.15.1 Hashemite Kingdom of Jordan**

Hashemite Kingdom of Jordan is the official name of Jordan. It is a constitutional monarchy with representative government and the executive authority of the king and it

employed by the prime minister and the cabinet. The current King is Abdullah II Ben Al Husain. Jordan became independent officially from Britain in 1948. It is a founding member of both the Arab League and the Organization of Islamic cooperation. In addition, in 1994 Jordan has signed a peace treaty with Israel (Olwan, 2010). Jordan appears to be following the western regimes as it has a close relationship with the west countries especially the United States of America and the United Kingdom (Jordan Ministry of Culture, 2010).

Jordan is located in the middle east area. It looks at the Red Sea to the south with borders with Syria to the north, Saudi Arabia to the south and east, Iraq to the northeast, and Israel and the West Bank to the west. Jordan is 89,213 Square Kilometers. The population of Jordan is around 10 million people. The society of Jordan is modern in nature and is mostly urban. It is considered as one of the safest Arab countries within the middle east area. It successfully has avoided terrorism and instability even through the hardest time including the Arab Spring. Jordan has been a great hospitable country in the region, it has accepted millions of refugees from its neighboring countries; 2.1 million Palestinians; 1.4 million Syrian refugees to name a few, residing in the country. Jordan is also a refuge to thousands of Iraqi Christians fleeing the Islamic State of Iraq and Syria. While Jordan continues to accept refugees, the recent large influx from Syria has placed substantial strain on the national resources and infrastructure. Although, the Jordanian economy is considered as one of the smallest economies of the region, with a lack of natural resources and heavy industries, it has been deeply hurt by the large flow of refugees and the regional turmoil, which hampers the economic growth (Al-Zyoud, 2011). Nevertheless, Jordan is considered and consistently enjoying a good standard of living and enjoying one of the highest living standards comparing to the neighboring countries and to the developing countries in general (Jordan Ministry of Culture, 2019). However, Jordan is classified as

one of the emerging markets in the region, therefore, it enjoys a good free trade agreements comparing to other developing countries according to the Chamber of Commerce of Jordan (2019). In addition to the high living standards of living the Jordanians relatively enjoys, they also enjoy a calm weather, a clean country with an extremely low crime rate by regionally and globally standards. The population of Jordan are considered highly educated comparing to the neighboring countries and to the developing countries in general.

### **2.15.2 Higher Education in Jordan**

The Jordanian higher education was established in the second half of the twentieth century. It started when several colleges for teachers throughout Jordan established to cater for the demand of teachers' manpower to meet schools' education. However, the first public university was established in 1962 only, it was named the University of Jordan, followed by Yarmouk university in 1976. Later another eight public university were established across Jordan to date. The first private university ever established in Jordan was Amman University in the year 1990, after more than 28 years. Then another 18 private universities to date. It only happened after the Jordanian council of higher education issued the first policy document that authorized the establishment of private universities (Ababneh, 2004).

#### Governing bodies of the higher education institutions

It all started in 1985, when the Ministry of Higher Education of Jordan was officially established with a mandate which included the process controlling of the student's specialization to meet the country development needs of specialized educated students instead of random pursuit by students themselves. By the year 1998, the Higher education law was officially announced which eventually abolished the entire ministry of Higher education of Jordan.

The new 1998 higher education law govern all Jordanian universities whether it is a public university or a private university. According to the 1998 higher educational law, each university should have several councils; university council; dean's council; Faculty council; and department council. Moreover, the law mandates that each university, whether its public or private should have a board of trustees. For public universities the board of trustees consists of 12 members in addition to the chairman and should be appointed by a royal decree by the king of Jordan upon a recommendation of the Jordanian prime minister. However, for private universities the board of trustees consists of 14 members in addition to the chairman and should be appointed by the board of higher education only (Al Maani, 2002).

#### University Council

According to the 1998 higher educational law, the need to form a university council is fundamental, the council should develop the university general policy; evaluating the university activities; reviewing the university rules and regulations; agreeing the university plans; strengthen the relationship with both the private and public sectors; examine the presidents annual reports; and preparing the budget for the `higher education council approval on annual bases (Al-Tarawneh and Al-Shqairat, 2010). The university council is chaired by the president of the university. However, the members of the council will includes: all the universities vice presidents; deans of the entire university; an elected member of each faculty for one year service subject to renewal; a two appointed by the university president administrative directors for one year service; three local community members to serve for one year, appointed by the higher education council through the university president recommendation; one selected student appointed by the president to serve for one year; one member from the alumni of the university to serve for one year selected by the university president (State University, 2018)

#### Deans' Council

The Deans' council is responsible for the appointing and promoting of the members of faculty, in addition to approving the faculty sabbaticals, leaves, and other faculty related

matters. Moreover, the deans' council responsibilities include the approving of the faculty curricula. The university president is the chair of the dean's council.

#### Faculty Council

The faculty council members include; the vice deans; the department heads of all faculties, an elected representative from each department by the department faculty members to serve for one year; two appointed faculty members with relevant experience appointed by the university president for a period of one year and subject to renewal. The faculty council is chaired by the dean of faculty.

#### Departmental Council

The department council members include all academic staff members of the department, that forms the basic unit of the university academic structure. The department council decisions are made by all academic members of the department.

#### Higher Education Quality Assurance in Jordan

The higher education quality assurance system and accreditation evolved due to the expansion of the higher education sector in Jordan. In 1990 the Accreditation Council (AC) was established to implement and formulate several criteria's for both public and private universities to establishing quality assurance measures and create a monitoring system that ensuring the compliance to the criteria by all universities (Olwan, 2010). The Accreditation Council (AC) was replaced by the Higher Education Accreditation Commission (HEAC) in 2007 with a focus to; accreditations of Jordanians universities, community colleges, and joint programs; insurance of the program's quality of the higher education institutions; overseeing and runs the national center of testing that was created to conduct tests for all higher education institutions specializations. The Higher Education Accreditation Commission (HEAC) quality standards is centered around; vision, mission, planning; educational programs and its efficiency; students and their support services; faculty members; scholarship, creativity, and research; library and information resources;

governance and administration; physical resources; financial resources; institutional integrity; community engagement; quality assurance management. The Higher Education Accreditation Commission (HEAC) vision was to raise the standard of specializations and faculty members of higher education institutions to be internationally recognized. In addition to, establishing a benchmark for the accreditation and quality assurance of the Jordanian higher education institutions to monitor and ensure that those accreditation and quality assurance are within the international higher education institutions standards to enable the cooperation between the Jordanian higher education institutions and the international research centers and accreditation and quality control commissions (Mahmood, 2010).

The higher education standard system for accreditation and quality assurance consists of six pillars that includes; the teaching; the learning resources; the learning assessments; the student achievement; the student support and guidance; the quality management. Each higher education institution is responsible for its own standards. However, there are no comprehensive assessment mechanism exists to date (Badran, 2014).

#### Higher education strategy in Jordan

The Ministry of Higher Education of Jordan was officially established in 1981 with a mandate which included the process controlling of the student's specialization to meet the country development needs of specialized educated students instead of random pursuit by students themselves. By the year 1998, the Higher education law was officially announced which eventually abolished the entire ministry of Higher education of Jordan.

The higher education strategy of Jordan was created and adopted by the Jordanian higher education ministry that consist of the seven pillars that includes; higher education institution governance, autonomy, leadership, management of human and financial

resources, and quality of teaching and research; admission policy, merits, intellectually, and competitions; accreditation and quality assurances of academic staff, programs, and delivery; research and development environment, funding, culture, and industry related; technological reform, training, culture, and focus; financing, funding, government and private support for students and the institution; human development environment that enable cultural and social activities for higher education institution that creates students clubs and services support, physical and cultural activities in campuses, communities interactions (Mahmood, 2010). However, Jordanian higher education has many barriers to implements the higher education strategy and is faces several challenges that includes slowness of strategic management implementation; lack of resources; inadequate organizational support; resistance to change among higher education staff; lack of mechanisms to implement changes to the system; mismatching of organizational structure with the management strategic process; unstable leadership (Batarseh, 2014).

#### Challenges of Higher Education in Jordan

Education is considered as a development center of each country and the key to accomplishing the millennium development goals. Education is measured as one of the most powerful instruments to reduce poverty and inequality for any country, it lays the foundation for the sustainability of the economic growth. There is a strong correlation between the spread of higher education and economic development and social returns that includes the spread of knowledge and culture of the society (Fergany, 2000). There are several challenges that currently facing higher education in the developing countries, including Jordan, and there is a great need for addressing these challenges and finding ways and mechanisms to overcome them to enhance higher education institutions (Al-Farawati, 2001).

The higher education institutions are facing challenges that require a suitable leadership and employees' innovative behaviour and abilities to be able to face challenges that includes; globalization, competition, technology, rapidly changing environment, to name a few in addition to assist other organizations as well by supporting innovation and solve their existing problems. Moreover, today they need to deal with many challenges in terms of globalization and technological evolutions (Mathew, 2010). Higher education institutes alongside with other organization are considered vital in terms of knowledge transfer, problems solving, and innovative support (Fullwood, R.; Fullwoodwely, J.; and Delbridge, R., 2013). in educational settings, students and teachers could think in an innovative manner in terms of dealing with educational challenges and generating solutions for educational complexities (Shane, 2003). It is evident that innovation allows organizations to be competitive and increase their performance (Hung et al., 2010, Gumusluoglu and Ilsev, 2009).

Jordanian higher education institutions are facing many challenges as argued by several schools (Mahmood, 2010; Al-Zyoud, 2011; Badran, 2014; Batarseh, 2014). The admission dilemma in the public Jordanian universities, as it is highly subsidized by the Jordanian government. Therefore, the admission to public universities is more competitive than at the community colleges level or the private universities. Moreover, the need for enhancing the curriculum appears to be a challenge; the curriculum development usually faces several challenges in structuring, implementation, and obtaining the desired results in Jordanian universities as discussed by Mahmoud (2008). Jordanian higher education faces several challenges that includes slowness of strategic management implementation; lack of resources; inadequate organizational support; resistance to change among higher education staff; lack of mechanisms to implement changes to the system; mismatching of organizational structure with the management strategic process; unstable leadership

(Batarseh, 2014). The role of leadership on higher educational setting is prominent, proper leadership has the potential to promote organizational innovation by motivating followers and creating a culture to enhance their creative and innovative skills that leads to improve innovation capabilities and competitive advantage for the institution (Li et al., 2014). Due to the mounting pressure of many challenges facing higher education that includes; globalization, changing demand and supply of higher education students; funding structure alteration. Higher education institutions worldwide are struggling to survive. Therefore, they are seeking competitive advantages to compete and attract students through innovations (OECD, 2009).

In conclusion, the higher education institutions in Jordan are not an exception. It is facing several challenges and the ability of a higher education institutions to address the challenges is influenced by a number of complex factors, including university mission statement, structure, culture, faculty involvement, and leadership. In addition to improving innovation behaviour. Examining these factors within the Jordanian higher education context will be essential to address the research questions.

#### Societal Culture of the Higher Education Challenges in Jordan

The societal culture in Jordan is a mix of both progressive and regressive belief where people have a strong proclivity towards the Western culture along with being close to their own culture (Al-Khasawneh, A. L. and Futa, S. M., 2013). The major societal culture in regards to higher education is based on focusing on the quality aspect along with valuing the importance of quality education. The relevance of receiving the quality education has increased significantly in last few years (Mahmood, 2010). Even though the focus is more on quality education, there have been instances of the poor quality of pedagogy affecting the overall education system in Jordan in a critical manner. Furthermore, the issue of

quality cannot be disassociated from the quest for excellence in the long run and is judged mainly by the pedagogical principles embodied by it (Olwan, 2010). Even though the culture demands quality education, there are a number of institutions offering little or less than quality education and can be assumed as a critical aspect in terms of dealing with the societal pressure of attaining quality education (Ababneh, 2004).

Majority of the students are aware of the conceptual framework being formed by the institutions but fail to question the authenticity because of the fact that ultimate power lies in the hand of universities. The philosophical standards are not discussed in length and can be assumed as a social problem. Kanaan, R.; Masa'deh, R.; and Gharaibeh, A. (2013) stated that another social issue has been in the form of difference in the power. The higher educational institutions have a great deal with power and authority, and students are often left with no answers to their questions. This also means that majority of the questions related to the education are unanswered. The inputs on programs, courses, competencies, grading system, and assessment system is either not shared or not questioned that does help in adding value to the higher education system. There is no doubt that without quality education, there is little scope for genuine and sustainable development in the long run and there is a need for improving the quality standard in the education system. However, there are little quality improvement standards in place along with lack of people to question such lacks. Hindi (2008) stated that the society of Jordan is a mix of people either willing to stand for their rights or being suppressed and least vocal because of the impact of regressive culture in some places.

This mismatch in the culture has resulted in the practice of engaging in unsocial practice by educational institutions that have been affecting the quality of education in a significant manner. Even though, the notion of accountability has been coined in the society of Jordan, there is little relevance in regards to the higher education system. This is mainly because

of the fact that there is little accountability being shown by such institutions and thus a decline in the quality of education. Kanaan et al., (2013) stated that even though accountability is a social phenomenon, its prevalence in the education system seems to be degrading making the entire education system obnoxious. There is very little doubt about the fact that education is the social right and should be accessible to all on the basis on merit without any discrimination. There should be equality in terms of accessing quality education along with facilitating social justice. Even though the social system promotes equality in every regard; there are issues in the form of favoring few at the expense of many. This has resulted in some serious discrimination in the education system that has also emerged as a societal issue in Jordan. There has been an increased in the numbers of students and still higher education institutions fail to absorb all the students because of the enrolment cap being issued by the Higher Education Council. This also led to a number of students leaving for abroad every year and causing brain drain. This is mainly because of the lack in the society in terms of creating a balance for each student (Al-Zyoud, 2011). The rising numbers ion students are finding it difficult to deal with the pressure of not being selected in preferred universities and finding another way in foreign countries. The entire education system needs to be blamed for this. Newman (2004) pointed another issue in the form of quotas given to some categories of students. Certain universities allow students from armed forces families that affect the numbers of students willing to get admission in general categories. There are also exceptions for students having lower graded and still getting admission in public universities based on quotas and other privileges (Al-Khasawneh, A. L.; and Futa, S. M., 2013). This entire social issue shave ben is affecting the quality of education in a critical manner. The number of students being admitted on a competitive basis is quite low that has been causing serious issue related to equality in the education system of Jordan.

There are more than 1.5 million Syrian refugees in Jordan according to Jordanian government. This has affected the political, economic, and social environment in a negative manner. Increased in the number of refugees has led to an impact on the depleted resources especially on the social services like healthcare and education. This has also led to increased job competition that has been straining the society in a negative manner.

Ramsden (2003) stated that the societal culture could not be blamed for these issues as people with power and authority needs to be changed for the betterment. However, people especially students have little awareness and authority to question the education system. This has led to an education system that runs on power and offers opportunities to students belonging to quotas rather than appreciating the competitiveness of getting admission and contributing to the success of the economy. Westerheijden, D.F.; Stensaker, B.; and Rosa, M.J. eds., (2007) further added that majority of the institutions are failing to attract bright minds and focus is more on filling seats based on quotas and other systems. This has not been helping the education system in the long run. Zemsky (2009) stated that such discrimination could be assumed as a social issue and focus should be more on empowering students with information and power. There should be more focus on analyzing the accountability of the higher educational institutions for further assessing the loopholes in creating such issues in the society that leads to discrimination among students. This will also challenge the societal culture of the higher education system in Jordan along with identifying ways forward to deal with such issues in the long run.

#### Threats and challenges that can link to human resource element

The characteristic of the higher education system in Jordan focuses on modern education system that has been the priority for last many years. In spite of focusing on the strong educational system, the literacy rate in Jordan is among the lowest in the region and not

many of the 19-23 years of age are attending universities (JMPIC, 2015). This can be assumed as against the characteristics of the higher education system in Jordan. The University of Jordan was established in 1962 and efforts of modernizing the educational system were initiated in the early 2000s. This shows that the significant reform in the system started a bit late that affected the overall appeal of the education system in a negative manner. The idea of promoting the knowledge-based economy embedded with the elements of innovation and technological advancement was far from perfect in the early years of reforms. Olwan (2010) further added that the ministry of higher education which was established in the mid of 1980 is watchfully of the higher education institutions in Jordan. Even though there are more than ten public universities and more than 20 private universities with a plethora of educational programs and courses; there is still knowledge skill gap that needs to be covered in a planned manner according to Ababneh (2004). The rise in the number of students enrolling for higher education has been increasing at a rapid pace, and scientific research funding agency was established in 2005 for scientific research and funding the research initiatives. However, because of the challenging economic conditions in Jordan, the expenditure on the higher education and research and development was quite a low right from the time of inception. Even though the public universities in Jordan received support from World Bank for funding the courses and programs along with collaboration with a number of international organizations; the results were far from the set objectives of filling the knowledge and skill gap in the short and long run. There were exchange programs with foreign universities in order to offer foreign experience to deserving students along with evaluating the learning outcomes of the students and analyzing the educational competencies. However, Ababneh (2004) noted that there was a serious issue in terms of matching the market specifications. Majority of the students

studying in public universities were not equipped with skills and knowledge to deal with the expectations of the big companies.

Even though funding initiatives were useful in reducing the increasing rate of unemployment along with promoting the social and personal development, the reality was a bit indifferent. Newman (2004) supported this argument by adding that the university budget mainly derived from the tuition fees and there were a number of students not being able to support their tuition fees and feeling rejected by the hands of public universities. There is no doubt that few of the universities also offered scholarship programs along with supporting students with low income, the benefits were largely shared by students having financial resources and belonging to different quotas. The rise in the number of students further led to an increase in the numbers of institutions willing to implement quality assurance in the higher education. Majority of the focus was on promoting the quality of the higher education along with formulating policies and standards ensuring good educational practices and promoting quality in the higher education system through the use of accreditation programs. The educational system further favors national exams for assessing the outcome and competencies of the students in Jordan (Al-Farawati, 2001). In the rapidly changing social environment, it is important to adopt new ideas and innovative thinking to excel well in the competitive global environment. Innovative ideas and thinking are further important for sustained superior performance and can be assumed as a strategic process and orientation involving the regeneration of processes and strategies. In regards to Jordan higher education system, there is a lack of innovative behaviour for the human resources at the private and public universities level. Majority of the course curriculum is almost obsolete with little innovation in course structure. al-Tarawneh and Mubaslat (2011) dried this argument by adding that the Ministry has collaborated with foreign universities and faculties that have aided the process of employees' innovative behaviour. However,

results are far away from being perfect because of the lack of innovative thinking and behaviour at all levels. The International accreditation is always helpful in attaining a greater degree of educational standards along with promoting an international standard of education helping students tone prepared for the challenges of foreign companies after completing their education. The rise of Jordanian universities in global ranking for higher education has further facilitated the influx of foreign students from different parts of the world. Zemsky (2009) further added that there is no doubt that the education system has been changing and evolving in Jordan from last few years but there remain challenges in the system that needs to be sorted out for a better degree of accomplishments in the future. Hindi (2008) further added that there are a number of challenges in the form of poor economy and increasing unemployment rate in the country. There are also issues in the form of rising number of higher education students and less or insufficient university budget that does not help in addressing the educational issues and gaps. Furthermore, there are inaccurate statistics regarding the nature of the labor market and weak collaboration with the private sector. The bureaucracy and non-responsive legislation also need to be blamed for such issues. Al-Maani (2002) further added that even though the issues have been concerning and revolve mainly around the economic situation, culture and social issues are equally contributory in this regard. This is mainly because of the fact that there is the difference in the power and authority between the students and universities and the majority of the concerns and issues are either rejected or neglected that do not help in dealing with such issues in a planned manner. Thus, it is important to closely analyze the existing educational system along with finding ways and solutions to deal with these problems (Al-Farawati, 2001). This will help in identifying solutions that will enhance the capability and appeal of the existing higher education system in a systematic manner. Overall, it can be said that the authorities need to identify a way through which

deserving students can be offered quality education through the use of quality teaching and learning methods. There is also a need for bridging the gap between rising number of students and fewer faculties. This will help in dealing with the entire issue along with strengthening the educational system in a systematic manner. The management and authorities of public and private universities need to devise strategies that will include student empowerment and participation along with facilitating the collaboration with private companies to understand the skill requirements (Mahmood, 2010). This will help in leading the students in the right direction. Such innovative behaviour is important to facilitate the higher education system be on par with the global education. However, this also requires support from the students, Ministry, universities, and faculties.

### **2.16 Summery**

This chapter of literature review has provided a theoretical background about transformational leadership and employees innovative behaviour and why the researcher decided to research the leadership style of transformational, in addition to the role of the transformational leadership style in employee's innovative behaviour in the domain of higher educational institutions. This research researcher studied the concept of innovative behaviour and leadership in general and the employees' innovative behaviour relation with transformational leadership style in particular. It was found that transformational leadership is appropriate for practicing in organization and the academic environment is not an exception. Transformational leadership strengthens and develop the followers' behaviour, capacity, and capability in order to achieve their desired goals by providing them with right supportive environment. the transformational leadership strategy followed by higher educational institutes may help them to develop unique capabilities in an

educational professional, and it leads towards the success of the organization (Al-Adwan and Smedley, 2012).

The researcher discussed the literature review on employees' innovative behaviour, organizational culture, employees' work engagement, and employees' attitude toward change. Next, he discussed the influence of transformational leadership on employees' innovative behaviour, the influence of transformational leadership on organizational culture, the influence of transformational leadership on employees' work engagement, and the influence of transformational leadership on employees' attitude toward change. Later, the researcher discoursed the impact of organizational culture, employees' work engagement, and employees' attitude toward change on employees' innovative behaviour. In addition to influence of the mediation role of organizational culture, employees' work engagement, and employees' attitude toward change between transformational leadership and employees' innovative behaviour. where he supports each of the hypothesis in this study with literature review that highlighted each of the ten hypothesis this study in intended to discuss.

The higher education system is been recognized the economic and social development mechanism of any country which include Jordan as well. In addition, it has been observed that innovation is the driver of this growth by adapting new ideas and innovative behaviour towards the prosperity of the any society. Education is measured as one of the most powerful instruments to reduce poverty and inequality for any country, it lays the foundation for the sustainability of the economic growth. There is a strong correlation between the spread of higher education and economic development and social returns that includes the spread of knowledge and culture of the society. Due to the mounting pressure of many challenges facing higher education that includes; globalization, changing demand

and supply of higher education students; funding structure alteration. Higher education institutions worldwide are struggling to survive. Therefore, they are seeking competitive advantages to compete and attract students through innovations (OECD, 2009). The role of leadership on higher educational setting is prominent, proper leadership has the potential to promote organizational innovation by motivating followers and creating a culture to enhance their creative and innovative skills that leads to improve innovation capabilities and competitive advantage for the institution (Li et al., 2014).

This chapter presented a background about the Hashemite Kingdom of Jordan and its higher educational institutions set up and strategy in order to provide an understanding of the country that the researcher is studying in addition to its higher education setup. It presentencing information about Jordan as a country, then the researcher discusses the higher education setup in terms of governing bodies of the HEIs in Jordan, and the quality assurance they are providing in addition to discussing the strategy they are implementing. The chapter then presents the higher education challenges they are facing in addition to the social culture that the HEIs are working within, Finally, the chapter discussed the Threats and challenges that can link to human resources issues and the lack of adapting new ideas and innovative thinking despite the importance of the matter.

## CHAPTER III: METHODOLOGY

### **3.1 Overview**

Throughout this chapter of research methodology, the researcher will discuss the research design and research design that was implemented to empirically test the theoretical model and the proposed hypotheses in this research. It will present research methodology; research paradigm; and the approach of this study so as to answer the research questions and hypotheses proposed by the researcher. This study is based on ontological assumption, it researches the objective view towards examine the relationship between transformational leadership and innovation behaviour through the mediation of organizational culture, employees' work engagement, and employees' attitude toward change in the higher educational institutional in Jordan. It will provide details regarding the method of quantitative approach and the reasons behind selecting this approach. In addition, this chapter will address the questionnaire surveys that was used in this study alongside the sampling implementation and procedure. A hypothetic – deductive approach was used to answer and investigate the proposed hypothesis. For theoretic framework, the Multifactor leadership questionnaire (Bass and Avolio, 2012), was used for the transformational leadership; IWB-4 items one dimension was used for employees' innovative behaviour (Scott, S., and Bruce, R., 1994); Hofstede was used for organizational culture (Hofstede, 1984); and the Utrecht work engagement scale were used for work engagement (Schaufeli et al., 2002).

The research is based on ontological assumption. It studies the objective view towards transformational leadership and employees' innovative behaviour. The objectivist stance aims in exploring transformational leadership adopted by leadership in Jordan higher education. In transformational leadership, the managers communicate with subordinates in

order to make decisions mutually. Hence, this view emphasizes on the structural aspect and assures that organizations that are following transformational leadership are highly innovative because of mutual interaction among management and employees. Based on this, the research philosophy selected for this study will be positivist philosophy. According to Merriam (2001), positivist paradigm or approach is often link with quantitative research, which is typically deductive and theory-testing. Researchers aims to identify casual explanations and fundamentals laws that explains regularities in human social behaviour adopts positivist approach. In addition, it emphasized that researcher who adopt a positive approach are independent of what is being observed (Easterby-Smith, M.; Thorpe, R.; & Lowe, A., 1994). The positive approach used by researcher whom they believe that the reality is independent and use empirical research of experiment and observation as a base to achieve that goal and to discover the theory (Saunders et al., 2012). Thus, this research will be empirical in nature and the research questions and hypotheses will be developed and tested further. This will lead towards producing the credible data regarding the impact of transformational leadership on employees' innovative behaviour through the mediation of organizational culture, employees' work engagement, and employees' attitude toward change in Jordan higher education. The selection of positivism philosophy will help in utilizing the existing theories of transformational leadership, employees' Innovative behaviour, organizational culture, employees' work engagement, and employees' attitude toward change for applying them on the Jordan higher education' institutes.

To properly address and asses the research questionnaire surveys seeking dependability and legitimacy of the study, the researcher implemented a pilot study before conducted the full research proposed sample data. Basic data analysis was performed to tests the data that includes; data screening; missing value treatment; demographical variables. Next,

Exploratory Factor Analysis (EFA) analysis for research' instrument was presented based on SPSS 20 results. Then, Then, the researcher will apply the Structural equation modelling with Amos 20.0 and applying the Confirmatory factor analysis. Later, (CR) Composite Reliability and (AVE) Average Variance Extracted were discussed. SPSS 20.0 software was used for data screening and editing for verification of entry, missing data, incompleteness and data omission. Finally, this chapter presents the ethical matters that was included to ensure the unbiased and the generalization of the study.

### **3.2 The choice of methodology and epistemology**

#### 3.2.1 Research strategy and approach

The researcher will be applying the deductive strategy approach for this study. The deductive strategy will lead towards proposing a new theory, which can be applied further towards examine the relationship between transformational leadership and innovation behaviour through the mediation of organizational culture, employees' work engagement, and employees' attitude toward change in the higher educational institutional in Jordan. The casual relationship among variables will be justified and the phenomena will be presented through enabling facts that will be measured by quantitative technique. The deductive strategy will also help in selecting the sufficient sample size to present the generalized result.

#### 3.2.2 Research Design

The research will be quantitative hypothetic-deductive. The researcher designed and developed this study taking in consideration all the need steps to reach the required research design. Six steps can be implemented to develop a research design that includes; Decide on the purpose of the research; agree on the setting of the research; select the type of the

research; the researcher extended within the research; the research time; conduct analysis and research context (Sekaran, 2000).

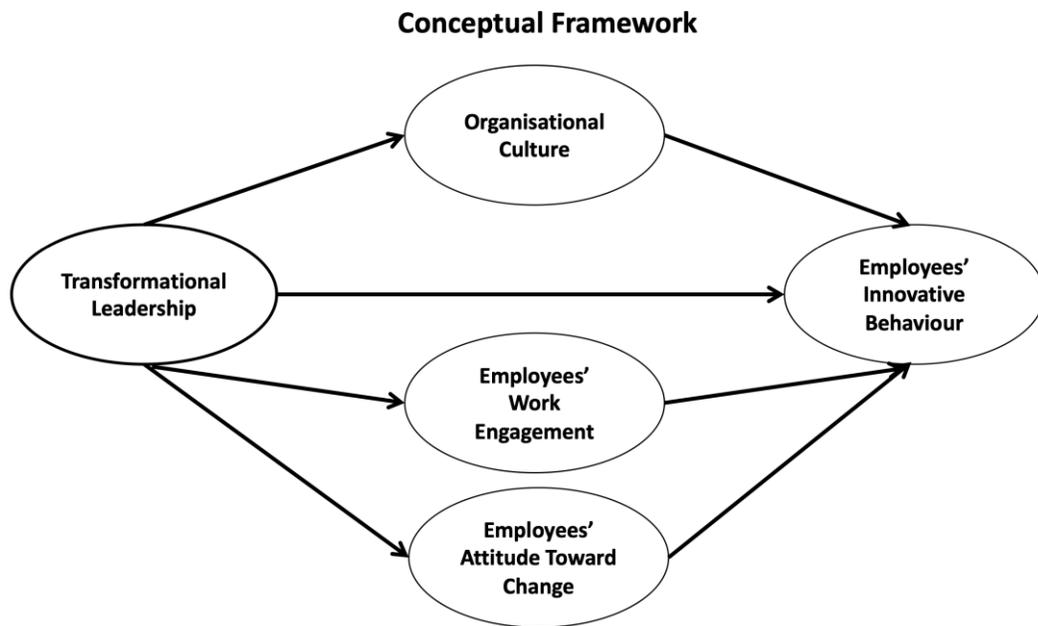
In this study, the questionnaire will be presented relevant to the research variables, which includes transformational leadership, employees' innovative behaviour, organizational culture, employees' work engagement, and employees' attitude toward change. These variables will be measured through gathering the empirical survey. In this way, the numerical, logical and fact-based findings will be presented, which will further help in presenting the data through graphical and statistical representation.

The research started with an extensive literature review on leadership and in transformational leadership style and employee's innovative behaviour in particular. The researcher discovered a gap in the literature towards examine the relationship between transformational leadership and innovation behaviour through the mediation of organizational culture, employees' work engagement, and employees' attitude toward change in the higher educational institutional in Jordan. For the research design, the researcher conducted quantitative methodological style using a questionnaire survey method approach that is associated with deductive system that he administers by himself with a close-end questions to collect the needed data form a private and a public university in Jordan. The use of quantitative data will lead towards experimental measurement and it will fulfil the objective stance of ontological assumption by justifying the role of transformational leadership on employees' innovative behaviour through the mediating role of organizational culture, employees' work engagement and employees' attitude toward change in Jordanian higher education institutes. This self-administrated questionnaire survey is usually completed by the respondents whom have been approach by the researcher. The close-ended questions are easier and quicker for the respondents to complete and offer a number of alternative answers where they can choose from. The answers for this survey are arranged of seven alternative answers, using 7 points Likert scale. During the research design phase, the researcher conducted 6 steps of research design

in terms of the purpose; the setting; the type; the researcher extends; time; and the research analysis as argued and proposed by (Sekaran, 2000).

### 3.2.3 Conceptual Framework

The main aim of reviewing the literature was to enable the researcher to create a conceptual framework for this study. Figure 3-1 is the framework



*Figure 3-1 Conceptual Framework*

### 3.2.4 Hypothesis

The developed conceptual framework of this study leads to the following hypotheses;

*H1: Transformational leadership is positively associated with employees' innovative behaviour.*

*H2: Transformational leadership is positively associated with organizational culture.*

*H3: Organizational culture is positively associated with employees' innovative behaviour.*

*H4: Organizational culture mediates the relationship between transformational leadership and employees' innovative behaviour.*

*H5: Transformational leadership is positively associated with employees' work engagement.*

*H6: Employees' work engagement is positively associated with employees' innovative behaviour.*

*H7: Employees' work engagement mediates the relationship between transformational leadership and employees' innovative behaviour.*

*H8: Transformational leadership is positively associated with employees' attitude toward change.*

*H9: Employees' attitude toward change is positively associated with employees' innovative behaviour.*

*H10: Employees' attitude toward change mediates the relationship between transformational leadership and employees' innovative behaviour.*

### **3.3 Population and sample**

Probability sampling and non-probability sampling are the two types of sampling techniques. Those two sampling techniques are also categorizing into various types. For this study, the researcher will be adopting the non-probability sampling technique whereby the convincing sampling type will be used. Applying the convincing sampling type helps

to approaching the targeted participants based on their availability as the researcher intended. As per the sample size of the study, the researcher adopted the stratified random sampling procedure to determine the optimal sample size so as to detect statistical significance due to accuracy and accessibility of this sampling type. The main advantages of the stratified random sampling type include: accuracy; easy to use; divisible; low-cost. (Hair, J. F.; Black, W. C.; Babin, B. J.; Anderson, R. E.; & Tatham, R. L., 2006, Saunders et al., 2012).

Two Jordanian universities were approached for this study, and have the questionnaires distributed to them. The two Jordanian universities were approached for this study, ***Mutah University*** which was established in 1981 in the southern region as the third public university in Jordan to follow the establishment of University of Jordan in the central region and Yarmouk University in the northern region, the university philosophy is based on three basic pillars; education, scientific research and community development. The university is consisting of 15 faculties, seven scientific faculties (Medicine, Engineering, Science, Nursing, Pharmacy, Information Technology) and seven humanities (Arts, Social, Education, Law, Business, Sport), as well as faculty of Graduate studies. The university has two deanships; student affairs and Scientific Research. It has 98 academic programs of which 51 undergraduate, 39 master's and 8 Ph.D.'s. The number of Mutah students at the beginning of the academic year 2017/2018 reached to 16851, of whom 14019 were bachelor students and 2831 were postgraduate students. The number of non-Jordanian student was 1157 students from 30 different countries. The university academic staff are (616) and the university employees are (1854) according to the university Human Resources Unit.

***Jerash University***, a private university which was established in 1992 in Jerash governorate. The university philosophy is based on three basic pillars; education, scientific

research and community development. The university is consisting of 11 faculties, six scientific faculties (Engineering, Science, Nursing, Pharmacy, Information Technology) and five humanities (Arts, Social Education, Law, Business, and Islamic Studies), as well as faculty of Graduate studies. The university has two deanships; student affairs and Scientific Research. It has 31 academic par programs of which 23 undergraduate, and 8 Post Graduate. The number of Jerash students at the beginning of the academic year 2017/2018 reached to 3896, of whom 3600 were bachelor students and 294 were postgraduate students. The number of non-Jordanian student was 1036 students from 19 deferent countries. The university academic staff are (171), and the university employees are (289) according to the university Human Resources Unit.

Next, the researcher selected that targeted population of the two universities and stratified them in to two groups with an appropriate sampling technique to ensure the relativity of each university size. Also, the researcher targeted the universitas employees whom had more than one year of working experience in each university to ensure exposure and culture familiarity of the targeted participants. Later, the researcher contacted both universities management and targeted employees to explain the purpose of the study and the contents of the questionnaire, in addition to address any questions or calcifications from them. In the questionnaire a covering letter was attached enclosing anonymity and confidentiality assurance of the respondents.

The population of this study consist of academics and administrators of both Mutah and Jerash universities. The researcher distributed a total of 420 questionnaires to both universities (210 questionnaires for each university). The returned filled questionnaires were 404, which give a very good response rate of 96.1%. The response rate for the public university (Mutah) was 214 (53%), and the response rate for the private university (Jerash)

was 190 (47%). To provide a satisfactory statistical power, a sample size should be greater than 100 in SME (Hair et al., 2006). Based on the returned filled questionnaires of 404, the sample size of the study is satisfactory and accepted, and the proposed formula in sample size determination by Glenn (2003) was applied;

$$n = \frac{N}{1+Ne}$$

n is the sample required size – N is the sample size – e is the sample error precision

### 3.4 Data collection

There are two major types of instruments used to gather primary data includes questionnaire and interview. For this study, the researcher used the questionnaire type is used. The questionnaire was developed according to the variables designed. Each variable will be measured through devising 5 to 6 item and these items will be further evaluated by using 7 points Likert scale, which includes

1	2	3	4	5	6	7
Not at all	Once in a while	Occasionally	Sometimes	Fairly often	Frequently	Always
Disagree strongly	Disagree	Disagree slightly	Neutral	Agree Slightly	Agree	Agree Strongly

The empirical data for this research was collected through paper-based surveys. The questionnaire was divided into two parts, the demographic information and the close-ended statement.

To ensure accuracy, the researcher tested the survey questionnaire by 5 Jordanian higher education experts in order to identify if there are any issues includes; wording; content; question ambiguity. Based on this test the higher education experts proposed some minor changes to the questionnaire which the researcher implemented accordingly. After

modifying the questionnaire, the researcher conducted a pilot questionnaire for 20 university employees of both academic and administration seeking feedback before distributing the whole questionnaire. Some other minor edit was proposed by the 20 participants were also implemented in the survey questionnaire and then distributed to all targeted participants in both universities. Moreover, all participants were briefed about the nature of the study and requested to provide explicit approval to ensure ethics policies are applied.

#### 3.4.1 Source of Information

Both the primary data and the secondary data which is gathered through exploring the published studies and researchers were gathered and presented in this study. The primary data which is gathered by directly approaching the respondents was gathered from a higher education professional of private and a public university in Jordan. The gathering of data from primary respondents is that the study aims to explore the quantified view of transformational leadership applied by higher education, which helps them in fostering employees' innovative behaviour in an organization. Therefore, collecting the data of the primary respondents will help in justifying the main aim of the study. Besides this, the secondary data will be gathered throughout the study in order to present the literature regarding the transformational leadership. The secondary data was gathered from published records that are available on various search engines. The search engines that used includes; Emerald; Science Direct; Taylor; Francis; Google Scholar; and Pro Quest. The relevant journals and articles were gathered from these sources in order to present the views of authors regarding transformational leadership and its relation to employees' innovative behaviour, organizational culture, employees' work engagement and employees' attitude toward change.

### 3.4.2 Data Collection

Between July 2021 and September 2021, the questionnaires were distributed to the targeted respondents in each university. A contacted person in each university was identified to collect the filled questionnaires. Then, the questionnaires were conveniently handed to each respondent in the sample frame with a cover letter, which had an introduction and description of the aim and drive of this research. The population of this study consists of academics and administrators of both Mutah and Jerash universities. The researcher distributed a total of 420 questionnaires to both universities (210 questionnaires for each university). The returned filled questionnaires were 404, which give a very good response rate of 96.1%. The response rate for the public university (Mutah) was 214 (53%), and the response rate for the private university (Jerash) was 190 (47%).

### 3.4.3 Data Screening

For data editing and screening for the verification that includes; data entry, missing data, data inadvertence, and incompleteness using SPSS version 20.0 software. Dealing with the missing values is important in the early stage of the data screening and if these missing values have any impact on the final result (Tabachnick and Fidell 2007). Moreover, missing values are quite common in data analysis and it shows when the respondent forgets to answer some questions (Hair et al., 2012). The response rate of the gathered data is considered a significant element for the reliability of the data. The data can be used and analyzed if the respondent answers more than 75% of the questionnaire (Sekaran, 2003). For this study, the 75% criteria were used to deal with the incomplete response. Fortunately, all the responses fulfilled this requirement, and none of the responses were considered incomplete. In regards to the missing values, the study missing values were less than 5%. If a specific variable has a missing data of 5% or less it is an acceptable variable

(Sekaran, 2003). Replacing the missing values with the mean values will not change the value of the mean (Hair et al., 2012). Therefore, in this study, the missing values were found to be less than 5%, and they are randomly distributed. Thus, they were replaced with the mean values.

#### 3.4.4 Common method

While collecting the data, the common method is considered as the deviation in the survey's response of the common response bias (Podsakoff et al., 2003). In general, common response bias can affect item reliabilities, item validities and covariance between the construct. The common response bias exists if one principal factor of the total variances' accounts for the majority of more than 50% (Podsakoff et al., 2003). In this study, the Harman's single factor methodology approach was used to test if the Common Method Variance (CMA) poses a serious threat or not. The result of the analysis showed that the ratio principal factor variance compared to the total variance was only 36.845% which is less than 50%. For that, it can be concluded that the common method response bias does not exist in this study and the researcher can proceed with implementing further analysis accordingly.

### **3.5 Questionnaire survey**

The researcher conducted quantitative methodological style using a questionnaire survey method approach that is associated with deductive system that he administers by himself with a close-end questions to collect the needed data from a private and a public university in Jordan. The use of quantitative data will lead towards experimental measurement and it will fulfil the objective stance of ontological assumption by justifying the role of transformational leadership on employees' innovative behaviour through the mediating role of organizational culture, employees' work engagement and employees' attitude toward change in Jordanian higher education institutes. This self-administrated

questionnaire survey is usually completed by the respondents whom have been approach by the researcher. The close-ended questions are easier and quicker for the respondents to complete and offer a number of alternative answers where they can choose from. The questionnaire survey strategy offers several possible explanations among variables relationships, and suggest models of those relationships (Bryman, 2012). This questionnaire survey strategy technique allows the researcher to collect large amount of date from a sizable population (Saunders et al., 2012). The answers are arranged of seven alternative answers. Multifactor leadership questionnaire was used for the transformational leadership, IWB-4 items, one dimension was used for employees' innovative behaviour, Hofstede was used for organizational culture, and the Utrecht work engagement scale were used for work engagement.

#### 3.5.1 Pilot test

Many benefits emerged by conducting a pilot test for the questionnaire survey. It supports the researcher to test the understanding of the questions by the responded; the questions mean the same to all contributors; and the questionnaire survey timeframe of completion (Sekaran & Bougie, 2011). For a pilot test for this study, the researcher conducted a pilot questionnaire for 20 university employees of both academic and administration seeking feedback before distributing the whole questionnaire. Some other minor edit was proposed by the 20 participants were also implemented in the survey questionnaire and then distributed it to all targeted participants in both universities. Moreover, all participants were briefed about the nature of the study and requested to provide explicit approval to ensure ethics policies are applied. To ensure accuracy even before running the pilot questionnaire a tested survey questionnaire by 5 Jordanian higher education experts was steered so as to identify if there are any issues includes; wording; content; question ambiguity. Based on this test the higher education experts proposed some minor changes to the questionnaire which the researcher implemented accordingly. Some other minor edit was proposed by the 20 participants were also implemented in the survey questionnaire and then distributed to all targeted participants in both universities.

### 3.5.2 Questionnaire translations

As the study is conducted in the English languages and the study is taking place in Jordan where the official language of the country is Arabic, the researcher believed that the translation for the questionnaire into Arabic language will assist the participant to better understanding the questions presented into the questionnaire which will lead to a better and more accurate results. There are many elements that the researcher needs to consider while translating the questionnaire survey to another language such as grammar, lexical, idiomatic, syntax, and experiential (Saunders et al., 2012). For this this delicate matter, the researcher reached-out to an independent translator to translate the original English version of the questionnaire survey into Arabic language in order to compare it with the researcher direct translation, and then translate the questionnaire survey into English language using the back translation technique procedure to create the final accurate version of the questionnaire to the participants. Meanwhile, the researcher took care of all aspect of the translation in terms of grammar, syntax, and experiential of the questionnaire survey.

### **3.6 Measurement**

Measurement is one of the crucial and fundamental part of the any study. The researcher used the several measurement scales to proceed with the study. Multifactor Leadership Questionnaire was used to test the leadership transformational style with it four dimensions of key areas or dimensions in the form of idealized influence, inspirational motivation, individualized consideration, and intellectual stimulation. A total of twelve questions were embedded in the questionnaire survey as of four questions for each dimension. For employees' innovative behaviour the researcher adopted the IWD one dimension. For work engagement the Utrecht Engagement Scale (Schaufeli et al., 2002). The scale includes nine items which indicate the three characteristics of vigor, dedication, and absorption were used to defined the work engagement. For organizational culture the study used Hofstede culture dimensions theory (Hofstede, 1984). For attitude toward change the researcher adopted the attitude toward org change (Dunham et al., 1989).

Exploratory Factor Analysis (EFA) analysis for research instrument was presented based on SPSS results. Structural Equation Modelling (SEM) using Confirmatory Factor Analysis (CFA) was applied to first order model fit. Composite Reliability (CR) and Average Variance Extracted (AVE) was discussed. The structural model was used to test the hypotheses.

The model presented independent variables, and dependent variables, in addition to control variables (age, gender, qualifications, and position). Independent and dependent variables were all measured using a 7-point Likert scale (“strongly disagree”, “agree”, “slightly agree”, “Neutral”, “slightly disagree”, “agree”, “strongly agree”) and a 7-point Likert scale (“not at all”, “once in a while”, “occasionally”, “sometimes”, “fairly often”, “frequently”, “always”).

### **3.7 Analytical strategy**

The quantitative data will be analyzed by using SPSS 20. The data, which will be gathered through a survey questionnaire, will be pooled into SPSS 20. and the various tests will be performed. First of all, the reliability test will be applied in order to check the consistency of data. The reliability range within 0.75 to 0.95 will be considered. The single linear regression will be performed in order to explore the linear impact among variable. The Pearson correlation analysis will be applied to check the association between dependent and independent variable. Besides this, to explore the moderating effect of employees’ work engagement, organizational culture, and employees’ attitude toward change the path analysis will be done through using Structure Equation Modelling (SEM) with AMOS V20.0. The means and standard deviations will be used to describe continuously measured variables like people’s perceived transformational leadership and the employees’ innovative behaviour perceptions and the frequencies and percentages will be used to describe categorically measured variables like sex and age of the respondents.

The Cronbach's alpha will be used to assess the reliability, i.e., internal consistency, of the measured constructs, too the exploratory factor analysis (EFA) and confirmatory factor analysis will be used to assess the dimensionality and factorial validity ( discriminant and convergent validity) of the measured concepts via subjecting the measured questionnaires to the maximum likelihood/Principal axis factoring extraction methods first then confirming the yielded factor analysis to the confirmatory factor analysis using the structural equation modelling technique with the correlation matrix between measured indicators and variables set as a unit-of-analysis.

The summed scores ( item parcel means) will be computed and analyzed further to assess the hypotheses of the study after confirming them for reliability, too the composite reliability (CR) and Average Variance Extracted (AVE) will be reported based on the structural equation modelling factor analysis, as an structural equation modelling evidence of the reliability of the measured constructs ( namely : employees' innovative behaviour, organizational culture, employees' work engagement , employees' attitudes toward change and transformational leadership) concepts. The compute command in the analytical program was used to compute the means, standard deviations and total sum scores of the measured concepts and domains of the study. The Levenes test of equal variance was employed to assess the equal variance assumption and the Kolmogorov-Smirnov test of Normality, histograms and the P-P plots to assess the Normality assumption of the analyzed variables. The goodness-of-fit of the structural equation models (CFA and path analysis) will be assessed using the chi-squared test of goodness-of-fit, RMSEA, and CFI of goodness of fit tests. The alpha significance level was set to 0.05 throughout the analysis. The SPSS Program V20.0, AMOS SPSS program V20.0 was used to analyze the data.

### **3.8 Ethical consideration**

The researcher considered highly the ethical element while conducting this study as research ethical matters are vital for any research or study. The researcher's behaviour of protecting the participants' rights and privacy was implemented. The rights of the individuals who are subject to the study should be protected and considered in detail by the researcher (Saunders et al., 2012). All permissions were obtained from both the participants and the universities. All data revealed from the study contributors were used with all needed privacy; confidentiality; anonymity; and sensitivity according to moral and legal responsibility accompanying with the research (Fiegen, 2010, Hart, 2011).

In order to maintain the quality of the research, the following aspect was considered:

- I. The questionnaire was prepared in simple and easy language. Any jargon or terminologies was not used, which could create difficulty for readers to understand the questions asked in the questionnaire.
- II. Any bias statement was not designed in the questionnaire, which could negatively influence the participants.
- III. The participants were approached after their permission and any forceful act was not done, which could de-motivate participants.
- IV. The participants were allowed to leave the questionnaire any time they wanted.

The secondary information gathered to prepare the literature would be collected through using authentic sources. Any unauthentic source will not be used, which can decrease the research quality.

## CHAPTER IV:

### RESULTS

#### 4.1 Assessing normality

The Skewness and Kurtosis tests were applied to the study constructs to test the normality issue. The result of the analysis shows that the values of Skewness and Kurtosis were found to be well within the recommended values between -1 to +1 (Hair et al., 1998). Table 4.1 shows the descriptive statistics for the normality test.

*Table 4-1 The descriptive statistics for the normality test*

	Descriptive Statistics		
	N	Skewness	Kurtosis
	Statistic	Statistic	Statistic
TL1a	404	-.244	-.597
TL2a	404	-.064	-.676
TL3a	404	-.473	.489
TL4a	404	-.617	.354
TL5b	404	-.549	.219
TL6b	404	-.444	.604
TL7b	404	-.539	.497
TL8b	404	-.401	-.098
TL9c	404	-.272	-.353
TL10c	404	-.038	-.589
TL11c	404	-.356	-.287
TL12c	404	-.339	-.275
TL13d	404	-.227	-.239
TL14d	404	-.450	.521
TL15d	404	-.434	.270
TL16d	404	-.415	.517
TL17x	404	-.378	.478
TL18x	404	-.135	-.111
TL19x	404	-.136	-.163
TL20x	404	-.601	.641
IB1	404	-.180	-.165
IB2	404	-.236	-.278

IB3	404	-.137	-.008
IB4	404	-.145	.065
IB5	404	-.014	.197
IB6	404	-.022	-.149
IB7	404	-.287	.597
IB8	404	-.124	-.248
IB9	404	-.162	-.780
IB10	404	-.321	-.319
WE1v	404	-.425	-.154
WE4v	404	-.520	-.063
WE8v	404	-.463	-.119
WE12v	404	-.686	.158
WE15v	404	-.358	-.041
WE17v	404	-.848	.916
WE5dd	404	-.533	-.093
WE2dd	404	-.669	.235
WE7dd	404	-.167	.067
WE10dd	404	-.742	.525
WE13dd	404	-.613	-.017
WE3abs	404	-.324	-.356
WE6abs	404	-.298	-.210
WE9abs	404	-.655	.233
WE11abs	404	-.619	-.098
WE14abs	404	-.527	.390
WE16abs	404	-.562	.198
AC1	404	-.181	-.297
AC2	404	-.469	-.180
AC3	404	-.196	-.148
AC4	404	-.289	-.310
OC1	404	-.049	-.674
OC2	404	-.527	-.110
OC3	404	-.311	.075
OC4	404	-.380	-.398
OC5	404	-.318	-.533
OC6	404	-.423	.225
OC7	404	-.502	.049
OC8	404	-.557	.445
OC9	404	-.358	-.154
OC10	404	-.220	-.806
OC11	404	-.439	.515
OC12	404	-.414	-.040
OC13	404	-.160	.300

OC14	404	-.131	-.240
OC15	404	-.569	.222
Mgr1IB	404	-.309	-.600
Mgr2IB	404	-.174	-.518
Mgr3IB	404	-.234	-.381
Mgr4IB	404	-.336	-.115
Mgr5IB	404	-.360	-.447
Mgr6IB	404	-.227	-.364
Mgr7IB	404	-.230	-.683
Mgr8IB	404	-.240	-.615
Mgr9IB	404	-.256	-.524
Mgr10IB	404	-.206	-.644

#### 4.2 Demographic statistics

This section gives details of the demographic statistics of the respondents to the survey; respondents were asked certain questions namely: university name, academic rank, experience years, gender and the age of all respondents. Table 4.2 shows the demographic statistics for the survey respondents.

*Table 4-2 Demographical Characteristics of Respondents*

University employee's demographic and professional		
	Frequency	Percentage
<b>Sex</b>		
Male	253	62.6
Female	151	37.4
<b>Age Group</b>		
25-35 Years	78	19.3
36-45 Years	138	34.2
46-57 Years	170	42.1
>57 Years	18	4.5
<b>Position</b>		
Professor	55	13.6
Practitioner Professor	23	5.7
Associated Professor	64	15.8
Assistant Professor	77	19.1
Lecturer	36	8.9

Assistant Lecturer	17	4.2
Administrator	71	17.6
Administrator Assistant	61	15.1
<b>University Type</b>		
Public University	214	53
Private University	190	47
University experience Years		9.74 (4.3)
Higher education experience Years		11.11 (4.9)
<b>Educational Attainment</b>		
Diploma Degree	9	2.2
University Degree	85	21
Master's Degree	105	26
Doctorate Degree	205	50.7

### 4.3 Measurement model results

Validity and reliability statistical analysis of the data will be discussed in this chapter utilizing the SPSS software version 20.0 for study construct namely: transformational leadership, Employees' Innovative Behaviour, employees' work engagement, and employees' attitude toward Change, organizational culture and managers' innovative behaviour.

#### 4.3.1 Exploratory Factor Analysis - EFA

The use of EFA was conducted to measure the factors of the research in terms of transformational leadership, employees' innovative behaviour, employees' work engagement, and employees' attitude toward change, organizational culture, and managers' innovative behaviour. A sample size of 300 is good and adequate for exploratory factor analysis (Mokhlis, 2006). For this study, the sample size of 404 meets this criterion. As Table 5.3-5.8 shows, KMO index for study factors, transformational leadership was 0.947, employees' innovative behaviour was 0.931, employees' work engagement was

0.951, and employees' attitude toward change was 0.907, organizational culture was 0.946 and managers' innovative behaviour was 0.942.

The total variance explained by the transformational leadership was found to be 76.524%. In addition, the items loading of these factors ranged from 0.636 to 0.840. Also, owing the value of 0.947 of the KMO, the sample was considered adequate. For Bartlett's tests of sphericity, the value was also significant which represents a strong relationship among items as represented in Table 4.3. below

*Table 4.3 The results of EFA for Transformational leadership*

Item	TL	$\alpha$
Transformational leadership		0.953
TL1	0.713	
TL2	0.741	
TL3	0.754	
TL4	0.766	
TL5	0.636	
TL6	0.704	
TL7	0.714	
TL8	0.744	
TL9	0.719	
TL10	0.713	
TL11	0.840	
TL12	0.705	
TL13	0.737	
TL 14	0.732	

TL15	0.796	
TL16	0.765	
TL17	0.654	
TL18	0.702	
TL19	0.750	
TL20	0.766	
% Variance	67.425	
Cumulative Variance (%)	67.425	
KMO	0.947	
Approx. Chi- Square	5863.711	
Sig	.000	

In addition, EFA was conducted to measure Employees Innovative Behaviour, (10 items). The total variance explained by this factor was found to be 61.778%. In addition, the items loading of these items ranged from 0.738 to 0.830. Also, owing the value of 0.931 of the KMO, the sample was considered adequate. For Bartlett's tests of sphericity, the value was also significant which represents a strong relationship among items as represented in Table 4.4. below

*Table 4.3 The EFA result for Employees' Innovative behaviour*

Item	IB	$\alpha$
Employees' innovative behaviour		0.931
IB1	0.781	
IB2	0.759	
IB3	0.830	

IB4	0.792	
IB5	0.790	
IB6	0.821	
IB7	0.757	
IB8	0.738	
IB9	0.801	
IB10	0.787	
% Variance	61.77	
Cumulative Variance (%)	61.77	
KMO	0.931	
Approx. Chi- Square	2647.752	
Sig	.000	

Moreover, EFA was conducted to measure employees' work engagement, (17 items). The total variance explained by this factor was found to be 68.69%. In addition, the items loading of these items ranged from 0.683 to 796. Also, owing the value of 0.951 of the KMO, the sample was considered adequate. For Bartlett's tests of sphericity, the value was also significant which represents a strong relationship among items as represented in Table 4.5. below

*Table 4.5 The EFA result for Employees' work engagement*

Item	IB	$\alpha$
Employees' work engagement		0.948
WE1	0.793	
WE 2	0.794	

WE 3	0.757	
WE 4	0.747	
WE 5	0.783	
WE 6	0.752	
WE 7	0.697	
WE 8	0.796	
WE 9	0.743	
WE 10	0.744	
WE11	0.722	
WE12	0.722	
WE13	0.683	
WE14	0.732	
WE15	0.717	
WE16	0.658	
WE17	0.728	
% Variance	68.698	
Cumulative Variance (%)	68.698	
KMO	0.951	
Approx. Chi- Square	4680.644	
Sig	.000	

Then, EFA was conducted to measure employees' attitude toward change, (4items). The total variance explained by this factor was found to be 78.396%. Moreover, the items loading of these items ranged from 0.870 to 0.908. Also, owing the value of 0.850 of the

KMO, the sample was considered adequate. For Bartlett's tests of sphericity, the value was also significant which represents a strong relationship among items as represented in Table 4.6. below

*Table 4.6 The EFA result for employees' attitude toward change*

Item	AC	$\alpha$
Employees' attitude toward change		0.907
AC1	0.871	
AC 2	0.909	
AC 3	0.891	
AC 4	0.870	
% Variance	78.396	
Cumulative Variance (%)	78.396	
KMO	0.850	
Approx. Chi- Square	1054.111	
Sig	.000	

Later, EFA was conducted to measure Organizational culture, (15 items). The total variance explained by this factor was found to be 26.68%. In addition, the items loading of these items ranged from 0.574 to 0.746. Also, owing the value of 0.946 of the KMO, the sample was considered adequate. For Bartlett's tests of sphericity, the value was also significant which represents a strong relationship among items as represented in Table 4.7. below:

*Table 4.7 The EFA result for Organizational Culture*

Item	OC	$\alpha$
Organizational culture		0.938
OC1	0.668	
OC2	0.670	
OC3	0.565	
OC4	0.639	
OC5	0.645	
OC6	0.714	
OC7	0.736	
OC8	0.718	
OC9	0.584	
OC10	0.746	
OC11	0.618	
OC12	0.703	
OC13	0.726	
OC14	0.574	
OC15	0.711	
% Variance	61.045	
Cumulative Variance (%)	61.045	
KMO	0.946	
Approx. Chi- Square	3624.655	
Sig	.000	

Finally, EFA was conducted to measure Managers' Innovative Behaviour (10 items). The total variance explained by this factor was found to be 66.38%. Moreover, the items loading of these items ranged from 0.581 to 0.872. Also, owing the value of 0.942 of the KMO, the sample was considered adequate. For Bartlett's tests of sphericity, the value was also significant which represents a strong relationship among items as represented in Table 4.8 below

*Table 4.8 The EFA result for Managers' Innovative Behaviour*

Item	MIB	$\alpha$
Managers' Innovative Behaviour		0.941
MIB 1	0.581	
MIB2	0.845	
MIB3	0.824	
MIB4	0.825	
MIB5	0.867	
MIB6	0.870	
MIB7	0.872	
MIB8	0.823	
MIB9	0.785	
MIB10	0.816	
% Variance	66.38	
Cumulative Variance (%)	66.38	
KMO	0.942	
Approx. Chi- Square	3156.889	
Sig	.000	

#### 4.3.2 Assessing Reliability for Research Instrument

The reliabilities for the transformational leadership, employees' innovative behaviour, employees' work engagement, and employees' attitude toward change, organizational culture and managers' innovative behaviour were assessed using the internal consistency through Cronbach's alpha test. As shown in Table 5.3 - 5.8. The Cronbach's alpha values for all constructs ranged from 0.907 to 0.953. Therefore, it is above the value of 0.70. Hence, it is sufficient to establish the reliability of all the study constructs.

#### **4.4 Measurement model variables**

The measurement model is considered as part of the SEM to deal with variables and indicators. The confirmatory factor analysis (CFA) is a pure measurement model (Hair et al., 2006). The researcher assessed the measurement model firstly in terms of its overall fit to the data depicting the relationships among dependent variables and independent variables based on their CFA structures to make sure that the indicators could be retained for later analysis. As mentioned before, this study adopted four criteria for assessing the measurement model fit: the chi-square ( $\chi^2$ ), GFI, NFI, CLI and RMSEA (Hair et al., 2006). Figure 5.1- 5.4 shows the initial CFA model with initial results for measurement model fit. The researcher made some modification in some models to get a better model fit, and deleted some items to improve the fit of the model as well. In addition, the researcher examines the reliability and validity of the study construct.

##### 4.4.1 Measurement Model for Transformational leadership

The initial model for Transformational leadership shows acceptable fit. Chi-square = 585.015 DF = 160,  $\chi^2/DF = 3.565$ , NFI = 0.902, GFI = 0.874 CFI = 0.927, RMSEA = .081. Therefore, no further modifications were required for the Transformational

leadership. The model showed acceptable value as shown in. The model showed acceptable values as shown in Figure 4.1.

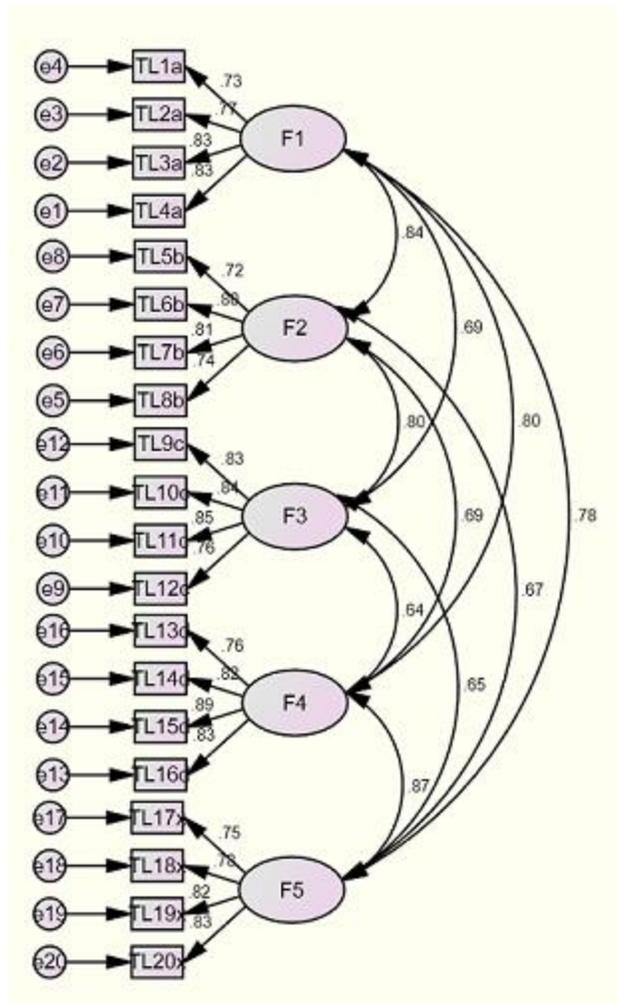


Figure 4-2 Measurement Model for Transformational leadership

#### 4.4.2 Measurement Model for Employees' Innovative Behaviour

The initial model for Employees' Innovative Behaviour presents some lack of fit. Chi-square = 280.550, DF = 35, X<sup>2</sup>/DF = 8.016, NFI = 0.895, GFI = 0.866, CFI = 0.907, RMSEA = .132. the researcher started by checking the items for their factor loading which

should be above the standard value of 0.50. After that, the model was checked for modification indices. Four errors were unacceptably related with other error (e2 –e3, e7-9 e8-e9 and e9-e10). The covariance terms are theoretically justifiable since they measure the same component and the measurement has something specific in common that are lacking in other statements. Therefore, the model was modified by adding a covariance between IB2-IB3, IB7-IB9, and IB8-IB9 and IB9-IB10. After that, the fit indexes show acceptable values Chi-square = 134.755, DF = 31, X<sup>2</sup>/DF = 4.347, NFI = 0.950, GFI = 0.932, CFI = 0.961, RMSEA = .091. The model showed acceptable values as shown in Figure4.2. Therefore, no further modifications were required for the employees’ Innovative behaviour. The model showed acceptable value as shown in Figure 4.2.

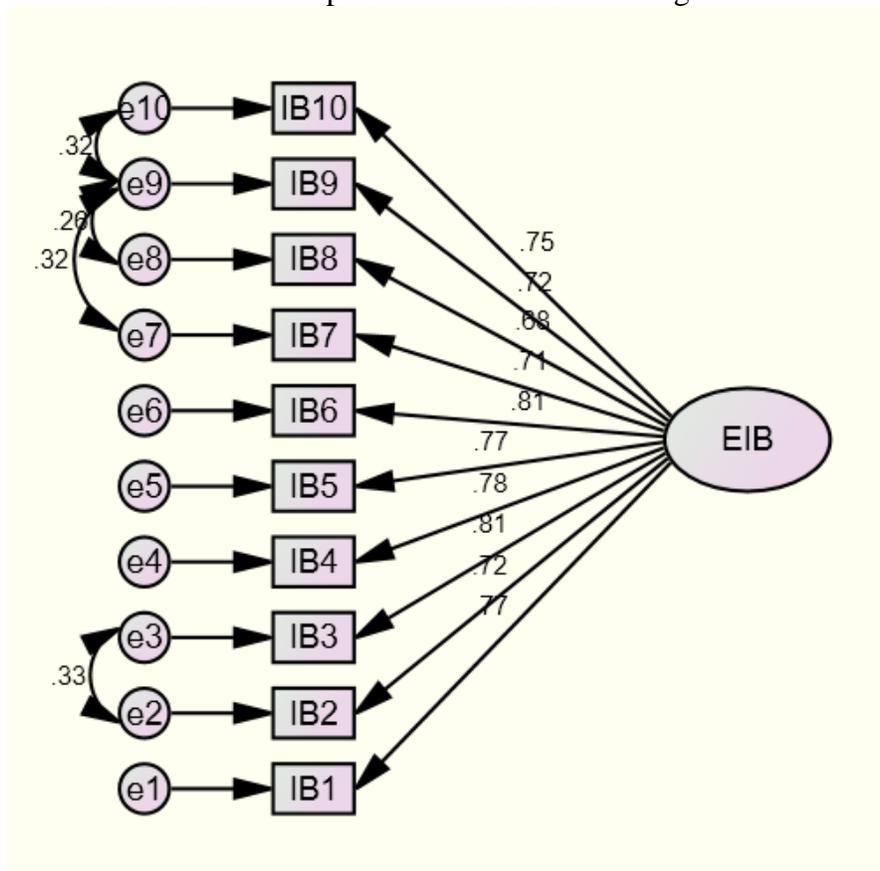


Figure 4-3 Measurement Model for employees' innovative behaviour

#### 4.4.3 Measurement Model for Employees Work Engagement

The initial mode for Employee's work engagement shows acceptable fit. Chi-square = 653.421, DF = 116, X2/DF = 4.857, NFI = 0.882, GFI = 0.823 CFI = 0.903, RMSEA = .098. Therefore, no further modifications were required for the employees' Innovative behaviour. The model showed acceptable value as shown in Figure 4.3.

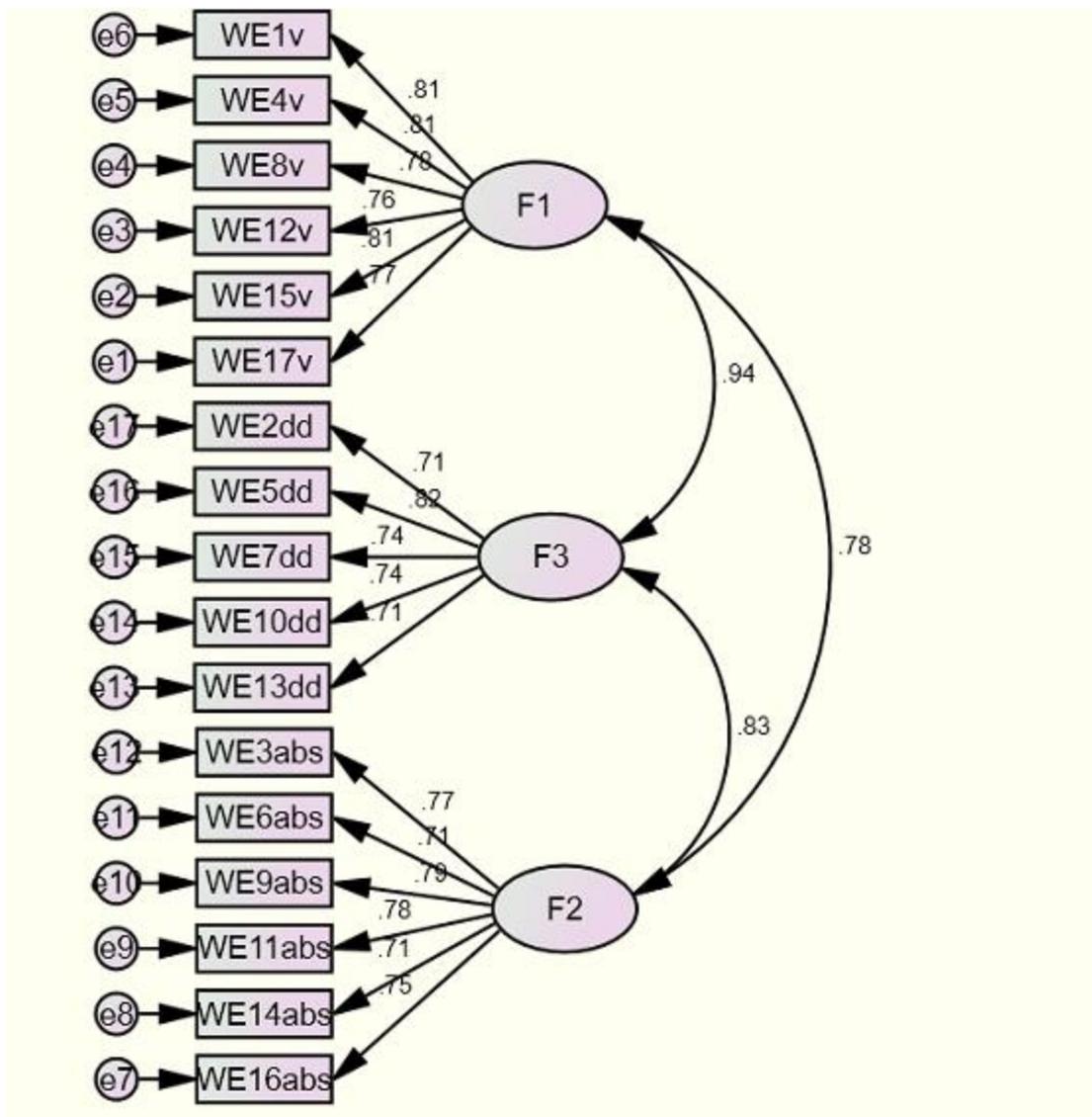
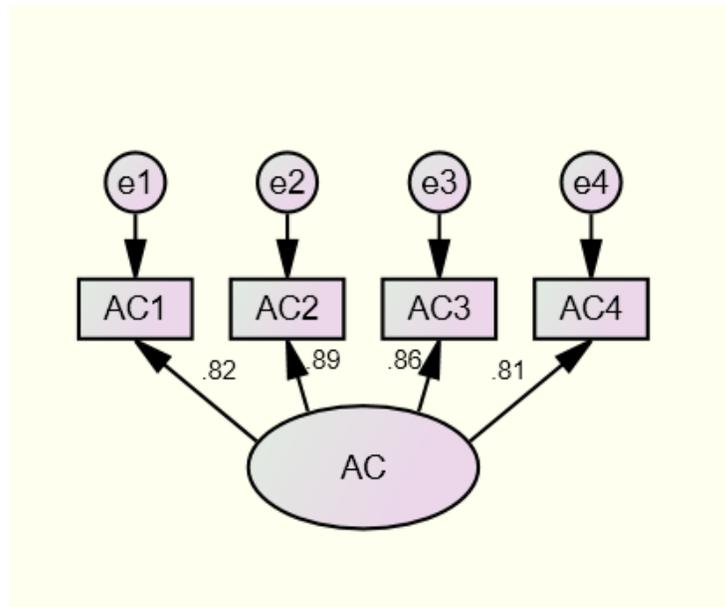


Figure 4-4 Measurement Model for Employee's work engagement

#### 4.4.4 Measurement Model for employees' attitude toward change

Employees' attitude toward change was assessed by using a four items scale; the initial model for knowledge sharing intention indicated acceptable value of fit, Chi-square = 1.166, DF = 2, X<sup>2</sup>/DF = .583, NFI = 0.99, GFI = 0.999, CFI = 1.000, RMSEA = .000.



*Figure Error! No text of specified style in document.-5 Measurement Model for employees' attitude toward change*

#### 4.4.5 Measurement Model for Organizational Culture

The initial model for organizational culture some lack of fit. Chi-square = 501.996, DF = 90, X<sup>2</sup>/DF = 5.578, NFI = 0.864, GFI = 0.845, CFI = 0.885, RMSEA = .107. First, the items were checked for their factor loading which should be above the standard value of 0.50. After that, the model was checked for modification indices. Two errors were unacceptably related with other error (e14 –e15 and e2-e3). The covariance terms are theoretically justifiable since they measure the same component and the measurement has something specific in common that are lacking in other statements. Therefore, the model was modified by adding a covariance between OC13–OC14, OC1-OC2. After that, the fit

indexes show acceptable values Chi-square = 415.508 DF = 88,  $X^2/DF = 4.722$ , NFI = 0.887, GFI = 0.872, CFI = 0.908, RMSEA = .096. The model showed acceptable values as shown in Figure 5.5. Therefore, no further modifications were required for the Organizational Culture. The model showed acceptable value as shown in Figure 4.5.

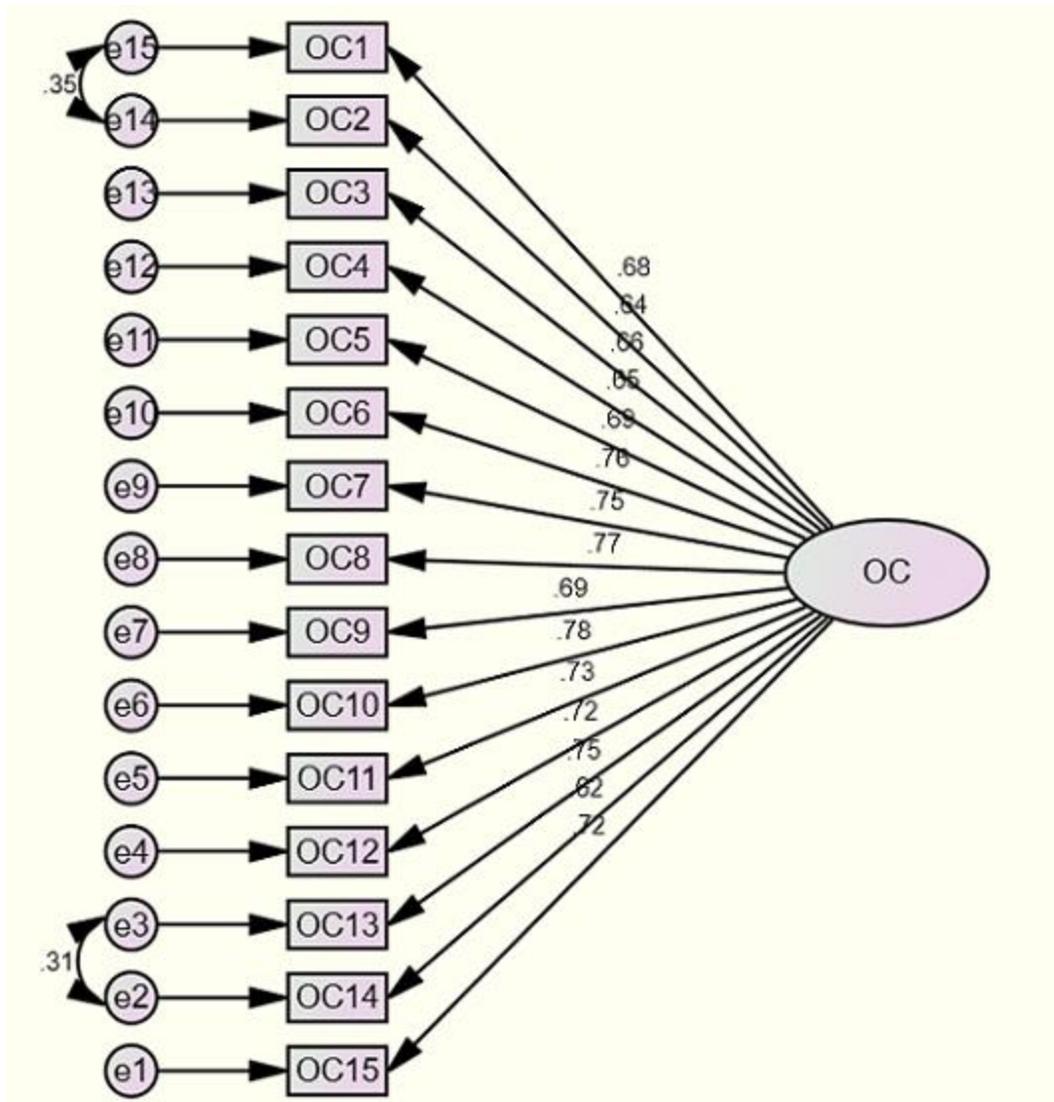


Figure Error! No text of specified style in document.-6 Measurement Model for organizational culture

#### 4.4.6 Measurement Model for Managers' Innovative behaviour

The initial model for Managers' Innovative behaviour some lack of fit. Chi-square = 223.863, DF = 35,  $X^2/DF = 6.396$ , NFI = 0.930, GFI = 0.897, CFI = 0.940, RMSEA = .116. First, the items were checked for their factor loading which should be above the standard value of 0.50. After that, the model was checked for modification indices. Two errors were unacceptably related with other error (e5 –e10 and e8-e9). The covariance terms are theoretically justifiable since they measure the same component and the measurement has something specific in common that are lacking in other statements. Therefore, the model was modified by adding a covariance between MgIB6-MgIB1, MgIB2-MgIB3. After that, the fit indexes show acceptable values Chi-square = 429,251 DF = 88,  $X^2/DF = 4.878$ , NFI = 0.858, GFI = 0.867, CFI = 0.833, RMSEA = .098. The model showed acceptable values as shown in Figure 5.6. Therefore, no further modifications were required for the Managers' Innovative behaviour. The model showed acceptable value as shown in Figure 4.6.

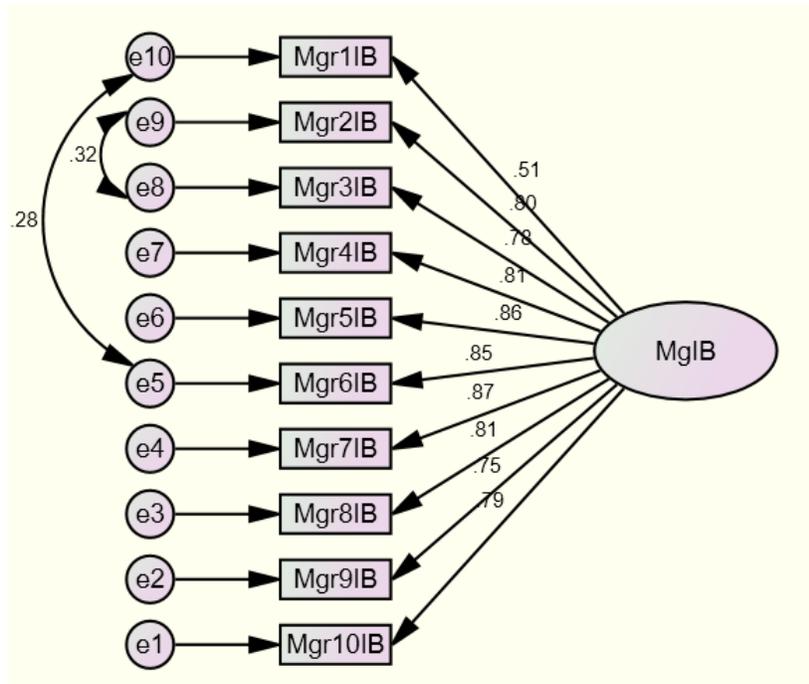


Figure 4-7 Measurement Model for Managers' Innovative behaviour

#### 4.5 Reliability and validity

The composite reliability (CR) was examined to ensure having good construct validity for all instruments. As indicated in table 5.9, the standardized loadings for all the observed variables were found to be higher than 0.50, ranged from 0.51 to 0.90. Moreover, the composite reliability values ranged from 0.909 to 0.953. Thus, all the constructs have CR values greater than 0.7 (see Table 4.9). In addition, discriminant validity exists given that the squared correlation between each pair of the construct is against the average of the AVEs for these two constructs (see Table 4.9)

Table 4-4 AVE and CR for the Study Constructs

Construct / Item	Standard Loading	AVE	CR
Transformational leadership		0.503	0.953
TL1	0.73		

TL2	0.77		
TL3	0.83		
TL4	0.83		
TL5	0.72		
TL6	0.80		
TL7	0.81		
TL8	0.74		
TL9	0.83		
TL10	0.84		
TL11	0.85		
TL12	0.76		
TL13	0.76		
TL14	0.82		
TL15	0.89		
TL16	0.83		
TL17	0.75		
TL18	0.78		
TL19	0.82		
TL20	0.73		
Employees' innovative behaviour		0.576	0.931
IB1	0.75		
IB2	0.72		
IB3	0.68		
IB4	0.71		

IB5	0.81		
IB6	0.77		
IB7	0.78		
IB8	0.81		
IB9	0.72		
IB10	0.72		
Employees work engagement		0.520	0.948
WE1	0.81		
WE2	0.81		
WE3	0.78		
WE4	0.76		
WE5	0.81		
WE6	0.77		
WE7	0.71		
WE8	0.82		
WE9	0.74		
WE10	0.74		
WE11	0.71		
WE12	0.77		
WE13	0.71		
WE14	0.79		
WE15	0.78		
WE16	0.71		
WE17	0.75		

Employees' attitude toward change		0.713	0.909
AC1	0.82		
AC2	0.89		
AC3	0.86		
AC4	0.81		
Organizational culture		0.506	0.939
OC1	0.68		
OC2	0.64		
OC3	0.66		
OC4	0.65		
OC5	0.69		
OC6	0.76		
OC7	0.75		
OC8	0.77		
OC9	0.69		
OC10	0.78		
OC11	0.73		
OC12	0.72		
OC13	0.75		
OC14	0.62		
OC15	0.72		
Managers' innovative behaviour		0.630	0.944
MgIB1	0.51		
MgIB2	0.80		

MgIB3	0.78		
MgIB4	0.81		
MgIB5	0.86		
MgIB6	0.85		
MgIB7	0.87		
MgIB8	0.81		
MgIB9	0.75		
MgIB10	0.79		

The average variance extracted (AVE) values for the study constructs ranged from 0.503 to 0.630. Thus, all the constructs used in this study showed good reliability and validity.

For Discriminant Validity. (See Table 4.10)

*Table 4-5 Discriminant Validity*

	CR	AVE	TL	AC	MgIB	OC	WE	EIB
TL	0.953	0.503	0.709					
AC	0.909	0.713	0.408	0.845				
MgIB	0.944	0.630	0.351	0.453	0.794			
OC	0.939	0.506	0.527	0.237	0.236	0.712		
WE	0.948	0.520	0.476	0.294	0.328	0.300	0.721	
EIB	0.931	0.576	0.664	0.466	0.319	0.552	0.449	0.759

#### 4.5.1 Hypotheses testing results

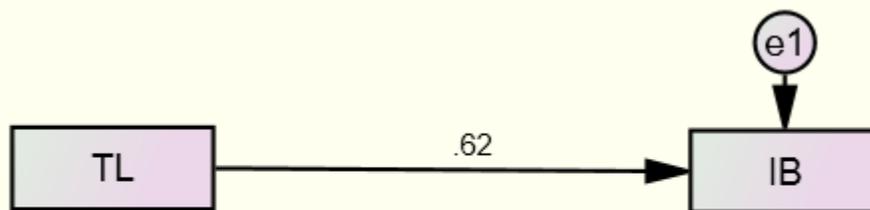
The hypotheses testing in this study was evaluated using the structural model in SEM. As noted earlier, this study has ten hypotheses, and the next subsection will discuss the result of each hypothesis.

### First hypothesis results

*H1: Transformational leadership is positively associated with employees' innovative behaviour.*

The first hypothesis in the study seeks to determine if there is a positive influence from Transformational leadership on employees' innovative behaviour. The result revealed that there is a positive influence from transformational leadership on employees' innovative behaviour. The path value  $\beta = .623$ , SE = .043, CR = 15.990, P-value = \*\*\*, which is statistically significant at level 0.05. Therefore, transformational leadership is positively associated with employees' innovative behaviour.

		Estimate	S.E.	C.R.	P	Label
IB	<--- TL	.623	.043	15.990	***	

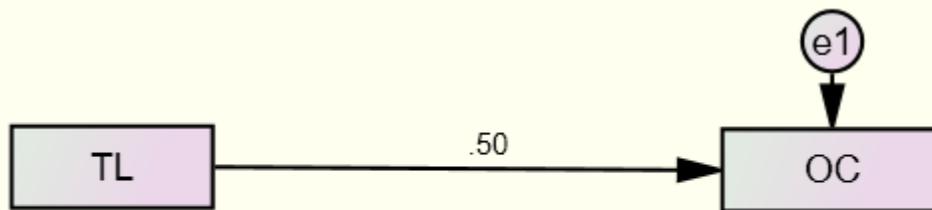


### Second hypothesis results

*H2: Transformational leadership is positively associated with organizational culture.*

The second hypothesis in this study seeks to determine if there is a positive influence from transformational leadership on organizational culture. The result revealed that there is a positive influence from transformational leadership on organizational culture, the path value  $\beta = .501$ ,  $SE = .052$ ,  $CR = 11.631$ ,  $P\text{-value} = ***$ , which is statistically significant at level 0.05. Therefore, transformational leadership is positively associated with organizational culture.

		Estimate	S.E.	C.R.	P	Label
OC	<--- TL	.501	.052	11.631	***	

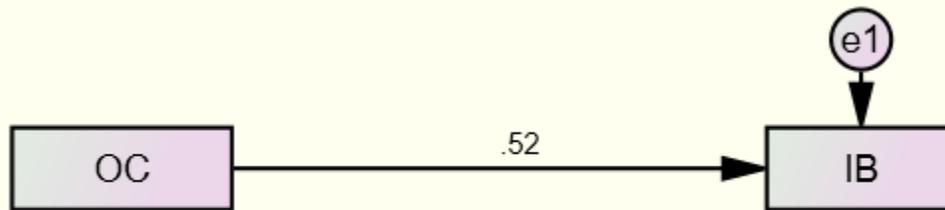


### Third hypothesis results

*H3: Organizational culture is positively associated with employees' innovative behaviour.*

The third hypothesis in this study seeks to determine if there is a positive influence from organizational culture on employees' innovative behaviour. The result revealed that there is a positive influence from organizational culture on employees' innovative behaviour, the path value  $\beta = .516$ ,  $SE = .039$ ,  $CR = 12.094$ ,  $P\text{-value} = ***$ , which is statistically significant at level 0.05. Therefore, organizational culture is positively associated with employees' innovative behaviour.

		Estimate	S.E.	C.R.	P	Label
IB	<--- OC	.516	.039	12.094	***	

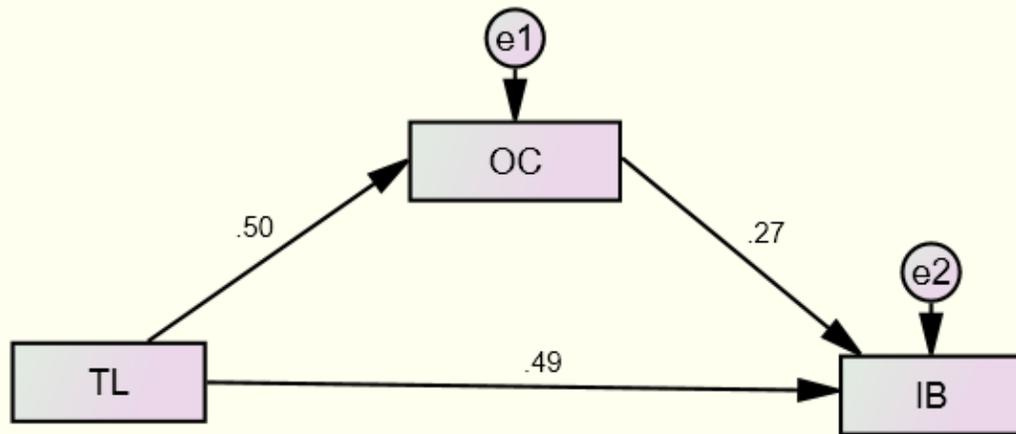


#### Fourth hypothesis results

*H4: Organizational culture mediates relationship between transformational leadership and employees' innovative behaviour*

This hypothesis is to determine if organizational culture mediates the relationship between transformational leadership and employees' innovative behaviour. The result revealed that organizational culture mediates the relationship between transformational Leadership and employees' innovative behaviour, the path value for transformational leadership on employees' innovative behaviour was  $\beta = .487$ ,  $SE = .047$ ,  $CR = 11.332$ ,  $P\text{-value} = ***$ , which is statistically significant at level 0.05. In addition, the path value for transformational leadership on organizational culture was  $\beta = .501$ ,  $SE = .052$ ,  $CR = 11.631$ ,  $P\text{-value} = ***$ , which is statistically significant at level 0.05. In addition, the path value for organizational culture on employees' innovative behaviour was  $\beta = .272$ ,  $SE = .039$ ,  $CR = 6.335$ ,  $P\text{-value} = ***$ , which is statistically significant at level 0.05. Thus, organizational culture mediated the relationship between transformational leadership and employees' innovative behaviour.

			Estimate	S.E.	C.R.	P	Label
OC	<---	TL	.501	.052	11.631	***	
IB	<---	TL	.487	.047	11.332	***	
IB	<---	OC	.272	.039	6.335	***	

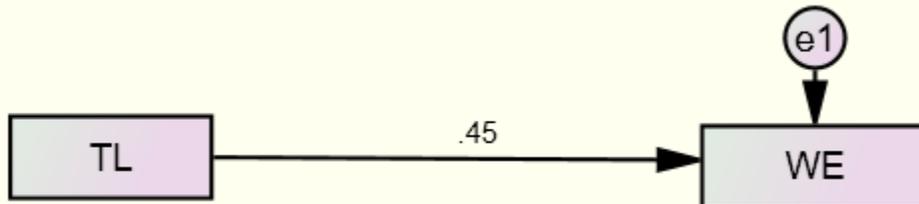


### **Fifth hypothesis results**

*H5: Transformational leadership is positively associated with employees' work engagement.*

The fifth hypothesis in this study seeks to determine if there is a positive influence from transformational leadership on employees' work engagement. The result revealed that there is a positive influence from transformational leadership on employees, work engagement, the path value  $\beta = .450$ ,  $SE = .056$ ,  $CR = 10.106$ ,  $P\text{-value} = ***$ , which is statistically significant at level 0.05. Therefore, transformational leadership is positively associated with employees' work engagement.

		Estimate	S.E.	C.R.	P	Label
WE	<--- TL	.450	.056	10.106	***	

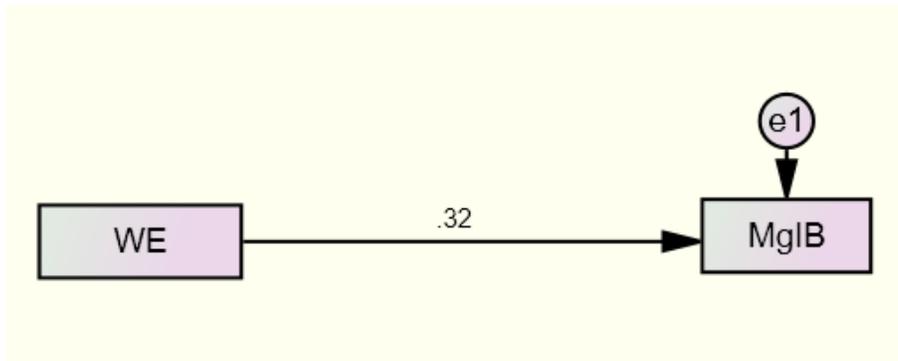


### Six Hypothesis Results

*H6: Employees' work engagement is positively associated with employees' innovative behaviour.*

The six hypotheses in this study seeks to determine if there is a positive influence from employees' work engagement on managers' innovation behaviour. The results revealed that there is a positive influence from transformational leadership on employees' work engagement, the path value  $\beta = .320$ , SE = .054, CR = 6.777, P-value = \*\*\*, which is statistically significant at level 0.05. Therefore, Employees' work engagement is positively associated with managers' innovation behaviour.

		Estimate	S.E.	C.R.	P	Label
MgIB	<--- WE	.320	.054	6.777	***	



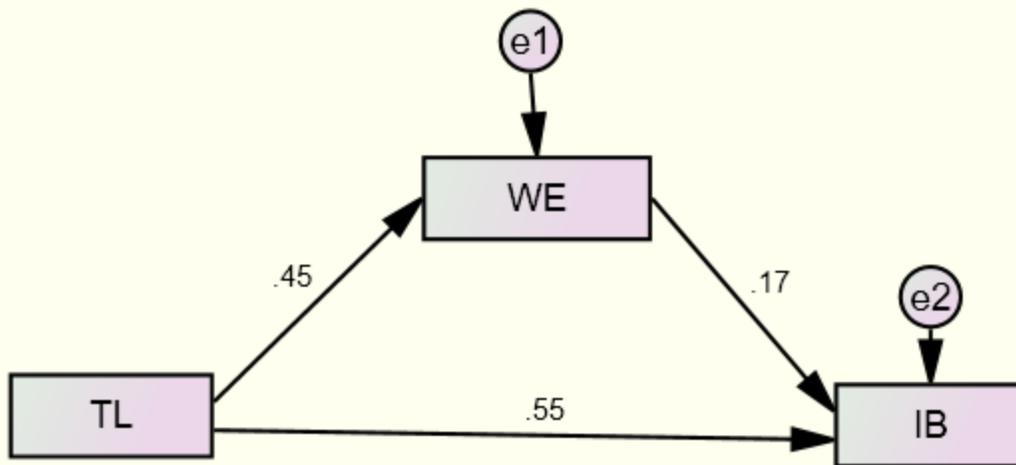
### Seven hypothesis results

*H7: Employees' work engagement mediates the relationship between transformational leadership and employees' innovative behaviour.*

The Seven in this study seeks to determine if employees' work engagement mediates the relationship between transformational leadership and employees' innovative behaviour. The result revealed that employees' work engagement mediates the relationship between transformational leadership and employees' innovative behaviour, the path value for transformational leadership on employees' innovative behaviour was  $\beta = .546$ ,  $SE = .047$ ,  $CR = 12.768$ ,  $P\text{-value} = ***$ , which is statistically significant at level 0.05. In addition, the path value for transformational leadership on employees' work engagement was  $\beta = .450$ ,  $SE = .056$ ,  $CR = 10.106$ ,  $P\text{-value} = ***$ , which is statistically significant at level 0.05. In addition, the path value for employees' work engagement on employees' innovative behaviour was  $\beta = .171$ ,  $SE = .038$ ,  $CR = 3.991$ ,  $P\text{-value} = ***$ , which is statistically significant at level 0.05. Thus, employee work engagement mediates the relationship between transformational leadership and employees' innovative behaviour

		Estimate	S.E.	C.R.	P	Label
WE	<--- TL	.450	.056	10.106	***	

			Estimate	S.E.	C.R.	P	Label
IB	<---	WE	.171	.038	3.991	***	
IB	<---	TL	.546	.047	12.768	***	

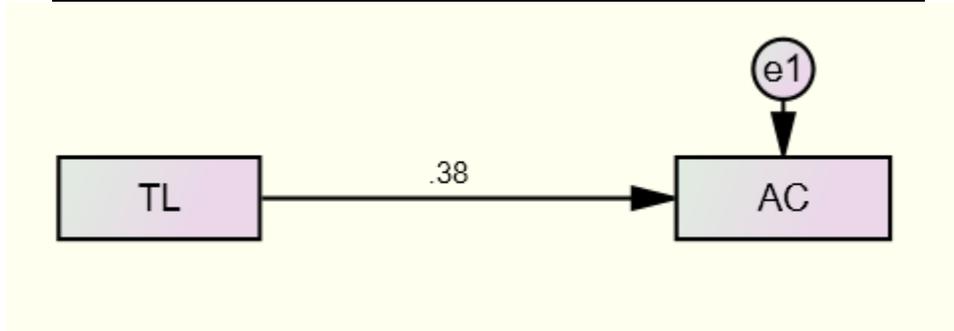


### Eight hypothesis results

*H8: Transformational leadership is positively associated with employees' attitude toward change.*

The Eight hypotheses in this study seeks to determine if there is a positive influence from transformational leadership on employees' attitude toward change. The result revealed that there is a positive influence from transformational leadership on employees' attitude toward change, the path value  $\beta = .384$ ,  $SE = .066$ ,  $CR = 8.352$ ,  $P\text{-value} = ***$ , which is statistically significant at level 0.05. Therefore, transformational leadership is positively associated with employees' attitude toward change.

		Estimate	S.E.	C.R.	P	Label
AC	<--- TL	.384	.066	8.352	***	

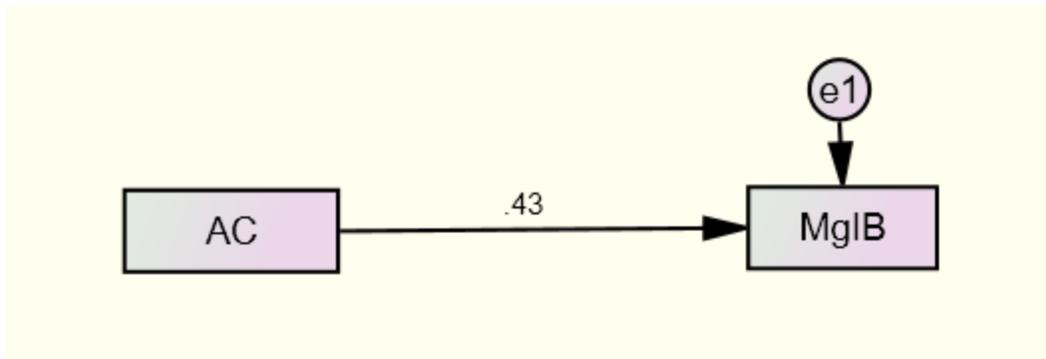


### Nine hypothesis results

*H9: Employees' attitude toward change is positively associated with employees' innovative behaviour.*

The Nine hypotheses in this study seeks to determine if there is a positive influence from employees' attitude toward change on managers' innovation behaviour. The result revealed that there is a positive influence from employees' attitude toward change on Manager Innovation behaviour, the path value  $\beta = .428$ , SE = .045, CR = 9.508, P-value = \*\*\*, which is statistically significant at level 0.05. Therefore, employees' attitude toward change is positively associated with Manager Innovation behaviour.

		Estimate	S.E.	C.R.	P	Label
MgIB	<--- AC	.428	.045	9.508	***	

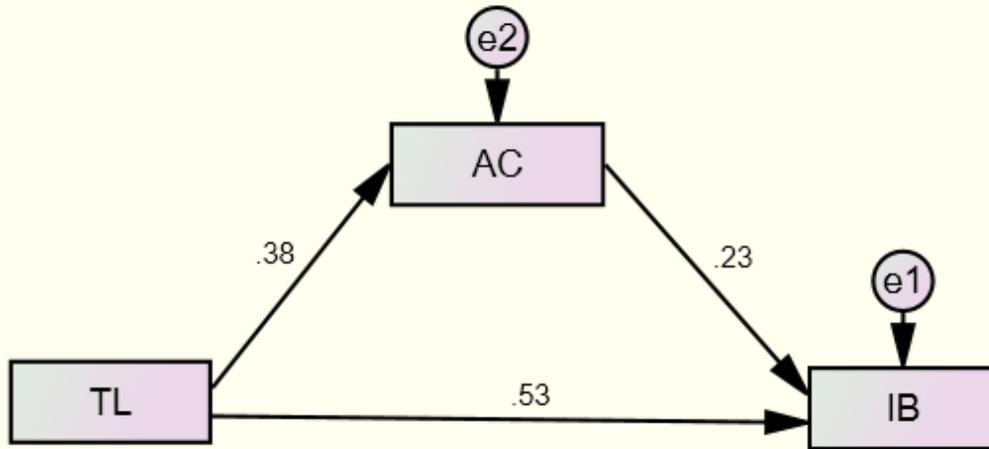


### Ten hypothesis results

*H10; Employees' attitude towards change mediates relationship between transformational leadership and employees' innovative behaviour*

The last hypothesis of the research is to determine if Employees' attitude towards change mediates relationship between transformational leadership and employees' innovative behaviour. The results of this hypothesis confirmed that Employees' attitude towards change mediates relationship between transformational leadership and employees' innovative behaviour. The path value for transformational leadership on employees' innovative behaviour was  $\beta = .534$ ,  $SE = .044$ ,  $CR = 13.154$ ,  $P\text{-value} = ***$ , which is statistically significant at level 0.05. In addition, the path value for transformational leadership on employees' attitude toward change was  $\beta = .384$ ,  $SE = .066$ ,  $CR = 8.352$ ,  $P\text{-value} = ***$ , which is statistically significant at level 0.05. In addition, the path value for employees' attitude toward change on employees' innovative behaviour was  $\beta = .232$ ,  $SE = .031$ ,  $CR = 5.720$ ,  $P\text{-value} = ***$ , which is statistically significant at level 0.05. Thus, Employees' attitude towards change mediates relationship between transformational leadership and employees' innovative behaviour.

			Estimate	S.E.	C.R.	P	Label
AC	<---	TL	.384	.066	8.352	***	
IB	<---	AC	.232	.031	5.720	***	
IB	<---	TL	.534	.044	13.154	***	



## CHAPTER V: DISCUSSION

### **5.1 Overview**

This study aims to present the co-relation and examine the relationship between transformational leadership and employees' innovative behaviour and/or through examine the relationship between transformational leadership and employees' innovative behaviour through the mediation of organizational culture, employees' work engagement, and employees' attitude toward change in the Jordan higher education institutions. For the data collection, the researcher conducted quantitative methodological style using a questionnaire survey method approach that is associated with deductive system that he administers by himself with a close-end questions to collect the needed data form a private and a public university in Jordan. The use of quantitative data will lead towards experimental measurement and it will fulfil the objective stance of ontological assumption by justifying the role of transformational leadership on employees' innovative behaviour through the mediating role of organizational culture, employees' work engagement and employees' attitude toward change in Jordanian higher education institutes. This primary data collection was supported by a secondary data collected from a comprehensive review of literature in the domain of leadership style in general and transformational leadership style in particular, in addition to the employees' innovative behaviour literature. For this study, a conceptual framework was created and developed by the researcher to examine the impact of transformational leadership on employees' innovative behaviour through the mediating role of organizational culture, employees' work engagement and employees' attitude toward change in addition to ten hypothesises. the researcher conducted a pilot questionnaire for 20 university employees of both academic and administration seeking feedback before distributing the whole questionnaire. Some other minor edit was proposed

by the 20 participants were also implemented in the survey questionnaire and then distributed it to all targeted participants in both Mutah University as a public university and Jerash University as a private university. For the research measurement, Exploratory Factor Analysis (EFA) analysis for research instrument was presented based on SPSS results. Structural Equation Modelling (SEM) using Confirmatory Factor Analysis (CFA) was applied to first order model fit. Composite Reliability (CR) and Average Variance Extracted (AVE) was discussed. The structural model was used to test the hypotheses.

The results discovered that employees' work engagement, organizational culture, and employees' attitude toward change has a significant and positive role in the relation among transformational leadership and employees' innovative behaviour.

This chapter will discuss the effect of transformational leadership on employees' innovative behaviour, organizational culture, work engagement, and employees' attitude toward change. Then, it will discuss the effect of organizational culture, employees' work engagement, and employees' attitude toward change on employees' innovative behaviour. Later, it will discuss the mediational role of organizational culture on the relation between transformational leadership and employees' innovative behaviour, the mediational role of work engagement on the relation between transformational leadership and employees' innovative behaviour, and the mediational role of employees' attitude toward change on the relation between transformational leadership and employees' innovative behaviour.

## **5.2 Discussion of Research Question One**

The main objective of this study will be exposed and discussed the direct effect transformational leadership on employees' innovative behaviour through the mediation of organizational culture, employees' work engagement, and employees' attitude toward change in higher educational institutions in Jordan in higher educational institutions. It will

answer the main question of this research: *What is the role of transformational leadership on employees' innovative behaviour in higher educational institutions in Jordan?*

The outcome of the analysis of the data confirmed that there are a positive and significant effect of the transformational leadership style on the employees' innovative behaviour, supported by the SEM outcome to confirm the first hypothesis of the study "*H1: Transformational leadership style is positively associated with Employees' innovative behaviour*". Based on that result, the researcher can confirm that there are a positive and significant effect of the transformational leadership style on the employees' innovative behaviour. This outcome has been discussed and confirmed over time by several researchers in the literature. Leadership in general has been argued as an important and influential feature for the employee's innovative behaviour. Leadership has a significant and positive impact in fostering the innovative behaviour (Mumford & Gustafson, 1998; Jung, 2001). One of the most influential factors that promoting organizational innovation is transformational leadership (Bass, 1985; Basu & Green, 1997; Conger, 1999). More specifically, transformational leadership style tends to have more effect on the employees' innovative behaviour more than other leadership styles. As transformational leaders motivate and inspire employees to be more innovative (Jung & Sosik, 2002, Hung et al., 2003). They allow organizations to gain efficiency in business management as it allows the development of relationships with subordinates (Pieterse et al., 2010). Gu and Peng (2011) added that transformational leadership helps in empowering subordinates rather than just exchanging ideas with them along with guiding them through words. In supporting for this hypothesis in the literature, many scholars argued that transformational leadership can be viewed as one of the most influential elements to foster innovation of the organizations (Bass, 1985; Basu & Green, 1997; Conger, 1999). Transformational leadership also encourages creativity that leads to innovative behaviour in the short as well as in the long

run (Kahai et al., 2003). Transformational leadership encourage followers to view problems in a different manner that is generally based on creativity and innovation that help them realize their true value and importance. In regards to education and higher education, it can be said that the role of leadership is quite important. For example, Bryman (2007) conducted extensive research on leadership within the higher education context and identified a number of ways that leads to leadership effectiveness. Mintzberg (1998) stated that effective leadership could only occur in a higher educational setting if a professional bureaucratic approach is adopted where the leaders do not adopt any form of communication with the subordinates. Montana et al., (2008) argued that when transformational leadership is used within the higher education setup, it creates a friendly and responsive environment where students can learn and showcase their skills in a free manner. This form of leadership is also useful in driving the innovative behaviour as students are offered an environment where motivation drives their thinking leading to innovative ideas. Bryman (2007) further added that transformational leadership might not always lead to innovative behaviour as behaviour and attributes is based on beliefs and thinking that differ in each individual. Therefore, the result of this study supports the argument by several schoolers which confirms that transformational leadership style has a positive and significant effect on the employees' innovative behaviour at the Jordanian higher educational institutions.

### **5.3 Discussion of Research Question Two**

This section will answer the second question of this research: *What is the role of transformational leadership on organizational culture in higher educational institutions in Jordan?*

The outcome of the analysis of the data confirmed that there are a positive and significate effect of the transformational leadership style on organizational culture, supported by the

SEM outcome to confirm the first hypothesis of the study “*H2: Transformational leadership style is positively associated with Organizational culture*”. The data analysis of this research confirmed a positive and significant effect of transformational leadership on organizational culture. Structural equation modelling outcome support the suggested second hypothesis of the study “*H2: Transformational leadership is positively associated with organizational culture.*”. Therefore, the researcher can confirm that transformational leadership has a positive and significant role on organizational culture. This outcome of the research had been argued by several scholars in the literature. According to Nam Nguyen and Mohamed (2011), only a powerful leader can manage to cope with challenges and foster his followers to progress in achieving productivity and vision for the organization. Top management must articulate the need change for organization culture to become more transformational, where top-level leaders become the organizations new culture symbols (Bass, 1999). transformational leadership considered in many cases the required leadership for culture change. transformational leaders are able to better connect to their subordinates in an influential manner. So, they can build a healthy, supportive and creative culture in the workplace that is favorable for organizational goals as well as employees’ personal interests and motives. For this, leaders are important in building up the morale and motivational level of their employees for which various incentive programs are used and lot of encouragement is needed. All this directly affects the level of workforce performance and relationship that the members share with each other and with their organization.

The application of transformational leadership in higher education allows developing confidence in the employees by giving them autonomy. When staff members are involved in problem solving and change, it boosts their morale, as they feel recognized in the institutes. Besides this, it also leads toward commitment as the staff members become

dedicated towards the organization and keenly contribute to ensuring the company's success (Al-Omari, 2006). The major benefits gained by applying transformational style is that it allows the enhancement of the career of a higher education professional because of additional responsibilities assigned to them. As mentioned by Al-Adwan and Smedley (2012), the transformational leadership strategy followed by higher educational institutions may help them to develop unique capabilities in educational professionals and it leads towards the success of institution.

However, such instances require great deal of support and cooperation from leaders. If leaders are supportive and cooperative in creating and initiating a change in the culture, beliefs, ideologies, perceptions, and mindsets of followers through a learning and cooperative culture, there is every possibility of creating long term value in a significant manner. As mentioned above transformational leadership plays a significant part in facilitating the organizational culture. However, such role might be positive, negative, or neutral in nature dependent on the way leadership is exhibited. James et al., (2007) added that organizational culture is deeply affected by the leadership styles, and approaches, and transformational leadership is one form of leadership that is highly impactful and useful in shaping different organizational cultures in different industries.

Greenhalgh et al., (2004) added that transformational leaders often help in creating a positive environment for employees that helps in extracting the best out of them. This results into a robust and positive organizational culture helping in creating positive values. Heuvel (2009) further added that if leaders are not having an appealing personality and expertise, there is little chance of transforming others and leading by examples. Such transformational leadership will deter the positive performance of employees along with making them demotivated. Therefore, it can be assumed that transformational leadership

might create positive or negative impact on employee's dependent on the attributes and ideologies of leaders that have significant impact on followers.

A positive or negative organizational culture is based on the kind of environment that is created by leaders. Even though, a number of studies discussed the impact of transformational leadership on organizational culture. Many studies showcasing the positive impact rather than exploring the negative outcomes and impacts. In regards to such notions, it is hard to ascertain whether the influence of transformational leadership is positive or negative on organizational culture. This is why, it is important to test this hypothesis in a critical manner that will help in ascertaining the negative or positive impact in an illustrative manner. Therefore, the result of this study supports the argument by several schoolers which confirms that transformational leadership style has a positive and significant effect on organizational culture at the Jordanian higher educational institutions.

#### **5.4 Discussion of Research Question Three**

The Third question of this study is investigating the relationship between organizational culture and employees' innovative behaviour. This section will answer the third question of this study: *What is the role of Organizational culture on employees' innovative behaviour in higher educational institutions in Jordan?*

The data analysis of this research confirmed a positive and significant effect of organizational culture on employees' innovative behaviour. Structural equation modelling outcome support the suggested third hypothesis of the study "*H3: Organizational culture is positively associated with employees' innovative behaviour*". Accordingly, the researcher can confirm that Organizational culture has a positive and significant role on employees' innovative behaviour in higher educational institutions in Jordan. this outcome of the research had been argued by several scholars in the literature. Organizational culture considers as a stimulant for innovation (Mumford, 2000; Lau and Ngo, 2004; Carmeli,

2005; Hartmann, 2006; Chang and Lee, 2007). Organizational culture may lead employees to accept innovation as a fundamental value of the organization. Also, it makes employees feel more involved in the organization business (Hartmann, 2006). Organizational culture is the operational competency facet of the organization that is shaped through innovation (Siguaw et al., 2006). Organizational culture is a clear determinate of innovation strategy (Julia et al., 2011). Organizational culture is based on the beliefs and values shared by different people working within the organization (Jacobs et al., 2013). These values and beliefs are often helpful in defining a culture that becomes a thinking and common approach in dealing with issues and problems. In last few years, there have been a number of companies that have transformed their organizational culture which has helped in adding innovative value to the employees and organizations. Lee et al., (2009) stated that companies like Google have incorporated an open culture where employees can share their views and ideas in an open manner. On the other hand, companies like Facebook have also deployed an open culture where everyone sits together without any hierarchical differences that leads to sharing and exchanging of ideas in an open and transparent manner. Organizational culture is positively associated with innovated behaviour (Marcati et al., 2008). Findings from previous studies that support the positive and significant effect of organizational culture on employees' innovative behaviour, and the empirical data analysis of this study, the researcher confirms the positive and significant effect of organizational culture on employees' innovative behaviour higher education institutions in Jordan.

#### **5.5 Discussion of Research Question Four**

The fourth question of this study is investigating the indirect effect of organizational culture on the relationship between transformational leadership and employees' innovative behaviour. This section will answer the fourth question of this study: *Does organizational*

*culture positively mediate relationship between transformational leadership and employee's innovative behaviour in higher educational institutions in Jordan?*

The data analysis of this research confirmed a positive and significant effect of organizational culture on the relationship between transformational leadership and employees' innovative behaviour. Structural equation modelling outcome support the suggested fourth hypothesis of the study "*H4: Organizational culture mediates the relationship between transformational leadership and employees' innovative behaviour*".

Therefore, the researcher can confirm that organizational culture mediates the relationship between transformational leadership and employees' innovative behaviour. In the literature, the organizational culture can be assumed as a system that has every potential of affecting and shaping the behaviour of employees. This similarly means that behaviour can be either positive or negative leading to innovative, progressive, or regressive behaviour in the short and long run. A good organizational culture is always valuable in terms of motivating employees to achieve a common task and objective.

In many cases, a good organizational culture might lead to innovative behaviour in employees that might lead to positive and enhanced value creation process. This again means that organizational culture might lead to creativity that is always a sub part of innovation helping in creating innovative values and outcomes. Oreg et al., (2011) mentioned that a strong organizational culture is based on an open and transparent environment where employees and leaders are free to share their views and opinions without any issue or compulsion. This makes them free in terms of thinking in a creative and free manner that is always fruitful in terms of being innovative and contributing in the success of organizations.

This clearly shows that organizational culture can positively contribute in terms of enhancing the innovative behaviour of employees in a systematic manner. Robbins and

Judge (2007) further found that a strong organizational culture might not lead to innovative behaviour in all employees, as there might be a difference in opinions and acceptance of the same. This is where; organizational culture acts as a limitation in terms of facilitating an employees' innovative behaviour. However, there might be other factors that help in strengthening the relationship between organizational culture and employees' innovative behaviour in a positive and significant manner.

Svensen et al., (2007) further added that transformational leadership might lead to positive innovative behaviour among employees but the same needs to be tested, as there can be positive as well as negative influences. This hypothesis has been explained and discussed in the previous sections in an illustrative manner. The focus area of this hypothesis is to determine mediating role of organizational culture in the relationship between transformational leadership and employees' innovative behaviour. Organizational culture is driven and created by leadership and transformational leadership has the potential to create a strong organizational culture (Lee et al., 2009). On the other hand, employees' innovative behaviour can also be developed through a strong organizational culture. This means both transformational leadership and employees' innovative behaviour can create strong organizational culture that can further benefits these two variables. Oreg (2003) pointed that organizational culture has the potential to strengthen the transformational leadership and employees' innovative behaviour as both play an important and active role in defining the organizational culture. However, organizational culture can also affect the leadership if followers or employees are not willing to follow the leaders and their words. Organizational culture can further affect the employees' innovative behaviour if employees are unwilling to be creative and adamant on showing resistance towards the change. This means that there are both the possibilities of organizational culture mediating the relationship between transformational leadership and employees' innovative behaviour in

a positive and negative manner. The mediating model is establishing the relationship between the predictor and the outcome variable whereby the outcome variable can be clarified by the third variable (Baron and Kenny, 1986). This is why, it is important to test this hypothesis as early research works and opinions have both the notions and findings. The results of this study confirmed a positive and significant effect of organizational culture on the relationship between transformational leadership style and employees' innovative behaviour at the Jordanian higher educational institutions.

### **5.6 Discussion of Research Question Five**

This section will answer the fifth question of this research: *What is the role of transformational leadership on Employee's work engagement in higher educational institutions in Jordan?*

The outcome of the analysis of the data confirmed that there are a positive and significant effect of the transformational leadership style on Employee's work engagement, supported by the SEM outcome to confirm the fifth hypothesis of the study "*H5: Transformational leadership style is positively associated with Employee's work engagement*". The data analysis of this research confirmed a positive and significant effect of transformational leadership on Employee's work engagement. Structural equation modelling outcome support the suggested second hypothesis of the study "*H5: Transformational leadership is positively associated with Employee's work engagement*". Therefore, the researcher can confirm that transformational leadership has a positive and significant role on Employee's work engagement. This outcome of the research had been argued in the literature, work engagement was defined on the based on the individuals physical, cognitive, and emotional connections with the individuals' work tasks. The key reference of engagement as per this definition is the work role as argues by Kahn (1990). He conceptualized engagement as the "harnessing of organization member's selves to their work roles: in engagement, people

employ and express themselves physically, cognitively, emotionally and mentally during role performances” (p. 694). Other scholars define work engagement as a two-dimensional construct that includes attention and absorption, they consider engagement as the positive antithesis of tension in the work itself or individuals work activity (Rothbard, 2001). However, the most cited work engagement definition that defines work engagement as a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption (Schaufeli et al., 2002). Thus, we can define and characterize work engagement by a high level of energy and enthusiasm with a strong work identification unlike disengagement whereas we can define and characterize it by a low level of energy and enthusiasm with poor work identification (Bakker and Demerouti, 2008). In modern organizations employees are expected to be engaged in their work, they should show initiative, and be innovative to achieve work engagement. Meanwhile, organizations should arrange working conditions with satisfactory motivation and energizing resources (Schaufeli and Salanova, 2006). As mentioned by Nam Nguyen and Mohamed, (2011), work engagement is referred as a positive feeling of the employee to fulfil his/her work on given timeline. The work engagement creates a significant impact on the overall employee productivity as it motivates them to achieve stretch targets. The work engagement allows the organization to retain their employees and it reduces the burnout problems in the organization (Vaccaro et al., 2012). On the other hand, the leadership behaviour of any organization plays a vital role on the employee’s behaviour. Transformational leadership is the leader’s behaviour which transformed the norm and values of the employees and motivate them to perform beyond their expectations (Yukl, 1989). Transformational leadership style focuses on the enhancing the employee’s involvement with the organizational goals (Bass, 1985). The application of transformational leadership style allows the leader to involve the workforce in decision-making, which allows reducing the

burnout. This is because the employee feels involved and engaged in the organization and it enhances their recognition level. Furthermore, it also allows employees to accept changes in the organization as they make decisions by interacting with the leaders (Dumdum et al., 2013).

Regarding testing the hypothesis mentioned above, the biggest motivation is in regards to the role of transformational leaders who are capable of engaging employees along with ability in motivating them in the right direction. Sykes et al., (2009) found that transformational leaders are quite aware of their role and often use their personality and influence to shape the behaviour and to think of their followers. Transformational leaders are different from other leaders as they showcase examples and lead from the front. They are also capable of engaging their followers in their communication and thought the process that plays an important role in adding value to their thinking and behaviour. It needs to be mentioned that employees are engaged in their work only when they are motivated to complete their work. Transformational leadership has an important role to play regarding motivating employees, guiding them, believing in them, and pushing to work innovatively regarding achieving the common tasks and objectives. Some academicians believed that effective transformational leadership has the potential to engage employees in their work and tasks (Vakola, 2005). However, transformational leadership is also dependent on some factors and because only transformational leadership can play an active and positive role in employees' engagement can be a false assumption. In this regard, it is important to make sure; this hypothesis is tested critically to ascertain the major or minor role of transformational leadership in employees' work engagement. The organizations of the modern times require transformational leaders who can develop enthusiasm and commitment in employees by adopting behavioural aspects in their character like charisma, so that they can convey their vision to the employees to attain ever increasing targets in the

competitive modern times (Al-Swidi et al., 2012). These leaders as per Bakker (2009) encourage employees to achieve organizational goals by providing them better services and solving their social nuisances and prepare them for the upcoming challenges and perpetually appreciate the talent in their employees and provide them with a sense of identification which increases their competency and they become enthusiastic. It's this enthusiasm which is significant to enhance the work engagement and the transformational leaders perpetually convey this enthusiasm and power to their employees by posing themselves as "prototype". This increases the zeal in employees and the augmented power acts as a motivational factor for work engagement in employee Bakker (2009). This helps in providing positive vision to the organization and increases the standards of the organization and they become equipped to face challenges and thus the zeal towards working increases and great optimism can be felt at the work place to attain success and results in tremendous increased in the work engagement (Bakker et al., 2007). Furthermore, it has also been researched that the everyday variations in the style of governance of the transformational leaders as per the requirement of the market and the work place results in influencing the work engagement. This increased work engagement can be attributed to high level of optimism and enthusiasm of transformational leaders who change and adapt with the modern times (Schaufeli & Bakker, 2010). Findings from previous studies that support the positive and significant effect of transformational leadership and work engagement, and the empirical data analysis of this study, the researcher confirms the positive and significant effect of transformational leadership on Employee's work engagement in higher educational institutions in Jordan.

### **5.7 Discussion of Research Question Six**

This section will answer the sixth question of this research: *What is the role of Employees' work engagement on Employees' innovative behaviour in higher educational institutions in Jordan?*

The outcome of the analysis of the data confirmed that there are a positive and significant effect of Employees' work engagement on Employees' innovative behaviour supported by the SEM outcome to confirm the sixth hypothesis of the study "*H6: Employees' work engagement is positively associated with Employees' innovative behaviour*". The data analysis of this research confirmed a positive and significant effect of Employees' work engagement on Employees' innovative behaviour. Structural equation modelling outcome support the suggested second hypothesis of the study "*H6: Employees' work engagement is positively associated with Employees' innovative behaviour*". Therefore, the researcher can confirm that Employees' work engagement has a positive and significant effect on Employees' innovative behaviour. This outcome of the research had been argued in the literature. Modern organizations employees are expected to be engaged in their work, they should show initiative, and be innovative to achieve work engagement. Meanwhile, organizations should arrange working conditions with satisfactory motivation and energizing resources (Schaufeli and Salanova, 2006). The work engagement allows the organization to retain their employees and it reduces the burnout problems in the organization (Vaccaro et al., 2012). It is a positive feeling of the employee to fulfil his/her work on given timeline. The work engagement creates a significant impact on the overall employee productivity as it motivates them to achieve stretch targets (Nam and Mohamed, 2011).

Employee work engagement is a positive and fulfilling state of mind that is related to work being driven and defined by the high amount of dedication and energy. There is no doubt that employee work engagement is highly researched subject and some scholars in the field

of business, psychology, human resource management, and organizational development have paid significant attention to the notion of employee work engagement (Giessner, 2011).

This is mainly because employee work engagement is considered as a favorable way towards enhancing the value and significance of any business. It makes a positive contribution to any business in the short and long run. However, there is very little clarity over the fact that employees' work engagement always leads to employees' innovative behaviour. This is because work engagement might lead to the better creation of operational and financial value to fulfilling organizational goals and objectives but there is no assurance on the fact that, such goals are achieved through innovative ideas and approaches (Jacobs et al., 2013). However, there is a possibility that work engagement might lead to positive, innovative behaviour because employees are motivated and dedicated to their approach along with having the zeal to perform well using innovative ideas and thinking. They might not always use innovative ideas while engaged in their work and still leading to the better degree of value creation. Thus, there are possibilities of work engagement might not be positively associated with the employees' innovative behaviour and this way, the proposed hypothesis needs to be tested critically for further clarity (Oreg, 2003). This will also help in understanding the role of work engagement in showcasing innovative behaviour or only professional and expected behaviour within the organizational settings.

Examining the link of work engagement and innovative work behaviour efforts by scholars was a few (Hakanen et al., 2008; Agarwal et al., 2012). Edwards (2001) identified that employees' work engagement is based and driven by some personal and professional factors. If employee work engagement is driven by pressure and challenging tasks, there is every possibility of embracing a safe way to deal with the work engagement and pressure

rather than trying innovative and creative ideas. Huhtala and Parzefall, (2007) concluded at their study to develop a conceptual framework for understanding the relationship between employee well-being and innovativeness that employee innovativeness is negatively influenced by burnout and likely to occur when employees are engaged in their work. Based on the findings from previous studies that support the positive and significant effect of work engagement on employees' innovative behaviour, and the empirical data analysis of this study, the researcher can confirm the positive and significant effect of work engagement on employees' innovative behaviour in higher education institutions in Jordan.

### **5.8 Discussion of Research Question Seven**

The seventh question of this study is investigating the indirect effect of work engagement on the relationship between transformational leadership and employees' innovative behaviour. This section will answer the seventh question of this study: *Does work engagement positively mediate the relationship between transformational leadership on employees' innovative behaviour in the higher educational institutions in Jordan?*

The outcome of the data analysis of the research confirmed a positive and significant effect of work engagement on the relationship between transformational leadership and employees' innovative behaviour. Structural equation modelling outcome support the suggested seventh hypothesis of the study "*H7: Employee work engagement mediates the relationship between transformational leadership and employees' innovative behaviour.*". Therefore, the researcher can confirm that work engagement mediates the relationship between transformational leadership and employees' innovative behaviour.

There is no doubt that employees work engagement is a significant aspect of organizational value creation process. This is mainly because employees' work engagement leads to customer loyalty as they perform their tasks and responsibilities in a dedicated manner. This leads to a dedicated and motivated work environment where employees are not only

engaged in their work but also helping in creating multiple values for organizations. On the other hand, employees' work engagement is not dependent on their motivation and dedication level but other factors like leadership and innovation. Sykes et al. (2009) mentioned that transformational leadership is an effective tool that creates such dedicated and motivated environment along with guiding employees in the right direction through words and actions. When employees are dedicated and motivated along with being guided, they tend to be relaxed in their approach that leads to creativity.

This stage can be assumed as quite critical as it leads to innovation stage that is important in showcasing employees' innovative behaviour. Robbins and Judge (2007) further added that a creative employee will always be innovative in his work and behaviour while a least motivated employee will always fulfil his general task and responsibilities as and when stated without showing any creativity or innovation. An engaged employee requires great support from organizations to be innovative and creative and until, and unless that support is offered, there are little chances of highlighting the employees' innovative behaviour in the long run. Some academicians believe that work engagement cannot define transformational leadership rather it is the other way around. This is mainly because leaders can help in enhancing the engagement of workers in the most innovative manner rather than employees; work engagement guiding the transformational leadership (Marcati et al., 2008). The work engagement creates a significant impact on the overall employee productivity as it motivates them to achieve stretch targets. The work engagement allows the organization to retain their employees and it reduces the burnout problems in the organization (Vaccaro et al., 2012).

The application of transformational leadership style allows the leader to involve the workforce in decision-making, which allows reducing the burnout. This is because the employee feels involved and engaged in the organization and it enhances their recognition

level. Furthermore, it also allows employees to accept changes in the organization as they make decisions by interacting with the leaders (Dumdum et al., 2013). Hence, the transformational leadership style adopted by leaders enables work engagement in an employee, and it enhances the innovation and creativity in the organization (Avolio and Yammarino, 2013).

The above discussion explains the direct and indirect relationships between; (1) transformational leadership and employees work engagement; (2) work engagement and employees' Innovative behaviour. The mediating model is establishing the relationship between the predictor and the outcome variable whereby the outcome variable can be clarified by the third variable (Baron and Kenny, 1986). So, the results of this study confirmed a positive and significant effect of employees' work engagement on the relationship between transformational leadership and employees' innovative behaviour in the Jordanian higher educational institutions.

### **5.9 Discussion of Research Question Eight**

This section will answer the eighth question of this research: *What is the role of transformational leadership on employees' attitude towards change in higher educational institutions in Jordan?*

The outcome of the analysis of the data confirmed that there are a positive and significant effect of the transformational leadership style on employees' attitude toward change, supported by the SEM outcome to confirm the first hypothesis of the study "*H8: Transformational leadership style is positively associated with employees' attitude towards change*". The data analysis of this research confirmed a positive and significant effect of transformational leadership on employees' attitude toward change. Structural equation modelling outcome support the suggested eighth hypothesis of the study "*H8: Transformational leadership is positively associated with employees' attitude towards*

*change*". Therefore, the researcher can confirm that transformational leadership has a positive and significant role on employees' attitude toward change. This outcome of the research had been the eighth question of this study is investigating the relationship between Transformational leadership and employees' attitude toward change. This outcome of the research had been argued in the literature. Attitude toward change is considered as part of the organization's employees' behaviour, the center of the organizational change is the employees (Tetenbaum, 1998). The organizations act and change through their employees, the success of the change will continue for over a long time when members modify on-the-job behaviour in an appropriate way. Alternatively, many scholars argued that because leaders often underestimate the center role employees play in the change process, many changes efforts fail (George and Jones, 2001; Greenhalgh et al., 2004). Therefore, organizations must depend on their employee's cooperation to realize intended change (Porras and Robertson, 1992). However, employees traditionally resistance to change has researched by many scholars. Oreg (2006) has reviewed the literature on employee's acceptance or resistance to change within the organization and identified that one key to determine if the employees will accept or resist the change is trust in Management. Transformational leadership has a positive impact on integrating information communication technology into teaching on the ability of schools (Leng, 2008). In Educational context, the application of transformational leadership in higher education allows developing confidence in the employees by providing them autonomy, which makes them proactive towards change. For instance, when the staff members are involved in problem-solving and change then it boosts their morale as they feel recognized in the organization. In this way, they prefer to contribute in the change process as they show their readiness towards change. Likewise, it also leads toward commitment as the staff becomes dedicated towards the organization and keenly contributes to ensuring the organization's

success (Al-Omari, 2006). The major benefits gained by applying transformational leadership in higher education institute is that it allows enhancing the career of a higher education professional because of additional responsibilities assigned to them.

Many studies discussed and discovered evidences of the relationship between employees' attitude toward change and transformational leadership. Transformation leadership style is confirmed to be associated with higher levels of change commitment along with good change management practice (Herold et al., 2007). A greater readiness for change of employees is positively correlated with their perceptions of the ability of change leaders (Bouckenooghe et al., 2009). Transformational leadership style can reduce cynicism toward change (Bommer et al., 2005). Employees' attitude toward change is a broad subject and attitude is driven by perceptions, values, beliefs, ideologies, and assumptions that can be changed or modified only when people are willing to drive a change (Vakola, 2005). However, there is also a possibility of transformational leadership not changing the attitude of employees. This happens when employees are rigid and adamant in their approach of working. This approach and attitude are formed on perceptions and beliefs that are hard to challenge and change. In such cases, transformational leaders will be having an insignificant impact on employees' attitude toward change.

In conclusion, the relationship between transformational leadership with employees' attitude toward change is confirmed with existing evidence in the literature as demonstrated above. Transformational leadership is positively associated with employees' attitude toward change. Therefore, the result of this study supports the argument which confirms a positive and significant effect of transformational leadership on employees' attitude toward change in higher education institutions in Jordan.

### **5.10 Discussion of Research Question Nine**

This section will answer the ninth question of this research: *What is the role of employee's toward change on employees' innovative behaviour in higher educational institutions in Jordan?*

The outcome of the analysis of the data confirmed that there are a positive and significant effect of Employees' work engagement on Employees' innovative behaviour supported by the SEM outcome to confirm the ninth hypothesis of the study "*H9: Employees' attitude toward change is positively associated with Employees' innovative behaviour*". The data analysis of this research confirmed a positive and significant effect of employees' attitude toward change on Employees' innovative behaviour. Structural equation modelling outcome support the suggested ninth hypothesis of the study "*H9: Employees' attitude toward change is positively associated with employees' innovative behaviour*". Therefore, the researcher can confirm that Employees' attitude toward change has a positive and significant effect on Employees' innovative behaviour. This outcome of the research had been argued in the literature. The employees' attitude toward change is associated with commitment to change. A greater readiness for change of employees is positively correlated with their perceptions of the ability of change leaders (Bouckenooghe et al., 2009). The commitment towards change has been and crucial element of the behaviour intention to support change, it was developed as an individual construct level (Fedor et al., 2006). Employees with high level of commitment to change are more likely to exhibit innovation implementation behaviour, whereas commitment to change can be described as a mindset that binds an individual to a course of action deemed necessary for successful implementation of change initiative (Herscovitch and Meyer, 2002).

The influence and importance of attitude on employees' innovative behaviour have been argued among several scholars in the literature. Jacobs et al. (2013) further added that attitude toward change might not be an influential factor related to employees' innovative

behaviour. Lee et al., (2009) stated that attitude toward change is mainly dependent on personality traits and each has different personality traits. This also means that employees' attitude toward change will never be similar to each in different environments. However, in regards to organizational settings, it needs to be mentioned that employee's attitude toward change is based on benefits and value being received in turn. At times, employees are reluctant towards change but still accept the change to survive in the environment. Oreg (2003) further added that employees in such cases do not exhibit a high level of employees' innovative behaviour as they accept the change based on the pressure created by their organizations. Therefore, the employees' attitude toward change can be positively considered as an influencer on innovated behaviour. As mentioned above, and based on the existing evidence in the literature, employees' attitude toward change is positively associated with employees' innovative behaviour. Therefore, the result of this study support and confirmed a positive and significant effect of employees' attitude toward change on Employees' innovative behaviour in Jordanian higher educational institutions.

### **5.11 Discussion of Research Question Ten**

The tenth question of this study is investigating the indirect effect of work engagement on the relationship between transformational leadership and employees' innovative behaviour. This tenth will answer the seventh question of this study: *Do employees' attitude towards change positively mediate relationship between transformational leadership and employee's innovative behaviour in higher educational institutions in Jordan?*

The data analysis of this research confirmed a positive and significant effect of employees' attitude toward change on the relationship between transformational leadership and employees' innovative behaviour. Structural equation modelling outcome support the suggested tenth hypothesis of the study "*H10: Employees' attitude toward change*

*mediates the relationship between transformational leadership and employees' innovative behaviour*". Therefore, the researcher can confirm that employees' attitude toward change mediates the relationship between transformational leadership and employees' innovative behaviour.

Transformation leadership style is confirmed to be associated with higher levels of change commitment along with good change management practice (Herold et al., 2007). Transformational leadership has been defining around the concept of change (Bommer et al., 2005). A greater readiness for change of employees is positively correlated with their perceptions of the ability of change leaders (Bouckenooghe et al., 2009). The commitment towards change has been a crucial element of the behaviour intention to support change, it was developed as an individual construct level (Fedor et al., 2006). Transformation leadership style as an environmental factor use influence on change-relevant behaviour such as innovation behaviour through commitment to change. Therefore, employees with high level of commitment to change are more likely to exhibit innovation implementation behaviour, whereas commitment to change can be described as a mindset that binds an individual to a course of action deemed necessary for successful implementation of change initiative (Herscovitch and Meyer, 2002). Transformation leadership can influence employees' attitudes by inspiring acceptance of innovation through the development of trust, openness, and enthusiasm. This style of transformational leadership creates vision and inspires followers to endeavor beyond required expectations, unlike the transactional leadership that focuses on extrinsic motivation for performance of job tasks (Jung, 2001). In summary, leadership is important to consider about acceptance of innovations and to work attitudes, perceptions, behaviour, service quality, and client outcomes. Because leadership is associated with organizational and staff performance, The mediating model is establishing the relationship between the predictor and the outcome variable whereby

the outcome variable can be clarified by the third variable (Baron and Kenny, 1986). Employee's attitude is never constant and keep changing as per the impact and influence of a wide array of factors (Jacobs et al., 2013). This also means that the impact of transformational leadership on employees' innovative behaviour is somehow mediated by the attitude of employees. Transformational leadership is quite important in pushing employees to exhibit behaviour that can be innovative. This behaviour is based on the attitude of employees regarding accepting the transformational leadership and facilitating the employees' innovative behaviour. In conclusion, the results of this study confirmed a positive and significant effect of employees' attitude toward change on the relationship between transformational leadership and employees' innovative behaviour in higher education institutions in Jordan.

### **5.12 Summery**

This chapter discussed the quantitative result outcomes achieved from collecting of the data and verified the objectives and the questions of the study. It also, presented the results outcome of the proposed ten hypotheses by the researcher that examine the relationship between transformational leadership and employees' innovative behaviour and or through the mediation of organizational culture, employees' work engagement, and employees' attitude toward change in the higher educational institutional in Jordan, and linked the results to the prier studies and researches that have been implemented by other scholars in the literature. The results of the study confirmed that the transformational leadership style positively and significantly has a role on the employees' innovative behaviour in the Jordanian higher educational institutions; confirmed and positive and significant effect of the transformational leadership style on organizational culture of the Jordanian higher educational institutions; transformational leadership style positively and significantly has a role on the employees' work engagement; transformational leadership

style positively and significantly has a role on the employees' attitude toward change; organizational culture positively and significantly has an effect on the employees' innovative behaviour; organizational culture positively and significantly has an effect on relationship between transformational leadership style and employees' innovative behaviour; employees' work engagement positively and significantly has an effect on employees' innovative behaviour; employees' work engagement positively and significantly has an effect on the relationship between transformational leadership style and employees' innovative behaviour; employees' attitude toward change positively and significantly has an effect on employees' innovative behaviour; and employees' attitude toward change positively and significantly has a role on the relationship between transformational leadership style and employees' innovative behaviour. The results of this study confirmed the previous studies outcome with the support of reliability and findings. The main conclusions and recommendations will be presented in the next and final chapter.

CHAPTER VI:  
SUMMARY, IMPLICATIONS, AND RECOMMENDATIONS

**6.1 Summary**

The main research aimed primary to present and examine the role of transformational leadership on employees' innovative behaviour. Also, to examine the effect of transformational leadership on employees' innovative behaviour through the mediation of organizational culture, employees' work engagement, and employees' attitude toward change in higher educational institutions in Jordan. For data collection, the researcher selected quantitative paradigm with the survey instrument. It was supported by literature review from several leadership researchers specially in the transformational leadership and employees' innovative behaviour domains utilizing the positivist method. Multifactor leadership questionnaire was used for the transformational leadership, IWB-4 items, one dimension was used for employees' innovative behaviour, Hofstede was used for organizational culture, and the Utrecht work engagement scale were used for work engagement. The researcher has selected sample of employees from two Jordanian universities were approached for this study, Mutah University as a public university and Jerash University as a private university.

The results of this study confirmed the previous studies outcome with the support of reliability and findings. It confirmed that the transformational leadership style positively and significantly has a role on the employees' innovative behaviour in the Jordanian higher educational institutions; confirmed and positive and significant effect of the transformational leadership style on organizational culture of the Jordanian higher educational institutions; transformational leadership style positively and significantly has a role on the employees' work engagement; transformational leadership style positively and significantly has a role on the employees' attitude toward change; organizational

culture positively and significantly has an effect on the employees' innovative behaviour; organizational culture positively and significantly has an effect on relationship between transformational leadership style and employees' innovative behaviour; employees' work engagement positively and significantly has an effect on employees' innovative behaviour; employees' work engagement positively and significantly has an effect on the relationship between transformational leadership style and employees' innovative behaviour; employees' attitude toward change positively and significantly has an effect on employees' innovative behaviour; and employees' attitude toward change positively and significantly has a role on the relationship between transformational leadership style and employees' innovative behaviour.

## **6.2 Research contribution**

The key contributions of this research can be obtained from the data analysis and discussion of the research results and its contribution to the theory and practice of the role of transformational leadership on employees' innovative behaviour and the effect of transformational leadership on employees' innovative behaviour through the mediation of organizational culture, employees' work engagement, and employees' attitude toward change within the Jordanian higher educational institutions context. The result of this study advances and delivers insights into the relationship between transformational leadership and employees' innovative behaviour and through the mediation of organizational culture, employees' work engagement, and employees' attitude toward change. This relationship has not been studied to date in higher education context in the developing countries like Jordan. This research can be considered as one of the first researches in Jordan that tackles and applies such research in Jordan and more specifically the Jordanian higher educational institutions. It highlighted the current status of employees' innovative behaviour in higher education institutions in Jordan and provides understandings to the higher education policy

makers and shed the light on ways to enhance the employees' innovative behaviour in higher education institutions in Jordan. Also, this study highlighted the transformational leadership adopted in the higher education institutions which can assist policy makers to address this leadership style and identify possible resolutions for development and improving of this important employees' behaviour. In conclusion, this study provides better understanding of the relationship between transformational leadership and employees' innovative behaviour in higher education institutions setting and provides methods and approaches to better promote and enhance employees' innovative behaviour. On academic level, this study contributes to the literature by enriching the library of theoretical relationship with a direct link of transformational leadership on employees' innovative behaviour, and indirectly through the mediating role of organizational culture, employees' work engagement and employees' attitude toward change in higher education institutions within developing countries.

On practical level, this study could assist and empower the leaders and policy makers in higher education institutions within developing countries including Jordan that facing pressure to create and enhance the innovative behaviour of their employees to overcome come the barriers and providing them with suggestions to improve, promote, and enhance employees' innovative behaviour.

### **6.3 Research implications**

#### **6.3.1 The theoretical implications**

The outcome of this research was implemented while reviewing the existing literature of the transformational leadership style and the innovative behaviour of employee's domain. This study aims to present the co-relation and examine the relationship between transformational leadership and employees' innovative behaviour and/or through examine the relationship between transformational leadership and employees' innovative behaviour

through the mediation of organizational culture, employees' work engagement, and employees' attitude toward change in the Jordan higher education institutions. Result of the research confirmed a direct positive and significant relationship between the transformational leadership style and the employees' innovative behaviour, and discovered reveals an indirect effect that employees' work engagement, organizational culture, and employees' attitude toward change has a significant and positive role in the relation among transformational leadership and employees' innovative behaviour.

In the literature, several scholars argued that transformational leadership can be viewed as one of the most influential elements to foster innovation of the organizations (Bass, 1985; Basu & Green, 1997; Conger, 1999). Transformational leadership also encourages creativity that leads to innovative behaviour in the short as well as in the long run (Kahai et al., 2003). Transformational leadership encourage followers to view problems in a different manner that is generally based on creativity and innovation that help them realize their true value and importance. In regards to education and higher education, it can be said that the role of leadership is quite important. For example, Bryman (2007) conducted extensive research on leadership within the higher education context and identified a number of ways that leads to leadership effectiveness. Mintzberg (1998) stated that effective leadership could only occur in a higher educational setting if a professional bureaucratic approach is adopted where the leaders do not adopt any form of communication with the subordinates. Montana et al., (2008) argued that when transformational leadership is used within the higher education setup, it creates a friendly and responsive environment where students can learn and showcase their skills in a free manner. This form of leadership is also useful in driving the innovative behaviour as students are offered an environment where motivation drives their thinking leading to innovative ideas. Bryman (2007) further added that transformational leadership might not

always lead to innovative behaviour as behaviour and attributes is based on beliefs and thinking that differ in each individual. However, there are also mixed studies were also found that the impact of transformational leadership on the creativity of students was not visible to a great degree (Kahai et al., 2003). Transformational leadership style has been found that is has marginal or little influence for the creativity of the employees when a study conducted by Jaussi (2003). Thus, there are agreements as well as disagreements in regards to transformational leadership is positively associated with employees' innovative behaviour. Therefore, this study results and outcome is considered significant as it contributes to the theory of this important and debatable matter. The outcome of this empirical research will support the dispute and argument that been discussed and argued on the positive and significant effect of the transformational leadership style on the employees' innovative behaviour in general and the mediation role of organizational culture, employees' work engagement, and employees' attitude towards change in specific. It will also support this argument in the higher education domain in general and the higher education in the developing countries, namely Jordan.

King and Anderson (2002) further added that in regards to organizational settings, the impact of organizational culture, employees' work management, and employees' attitude toward change affect the employees' innovative behaviour to an extent. In addition, transformational leadership can play an important and crucial role in this regard. Which also added to the importance and significant input of this research regarding to the mediation of organizational culture, employees' work engagement, and employees' attitude toward change of indirect impact of transformational leadership on employees' innovative behaviour.

Some earlier studies have investigated the relationship between transformational leadership and employees' innovative behaviour and showed some links between them in

serval sittings. However, the mediation of organizational culture, employees' work engagement, and employees' attitude toward change were less understood nor intensively researched which in return an interest among scholars; leaders; policy-makers; practitioners; and experts to explore those factors which may play a positive and significant role in those relationships. For that, this study added importance and significant input to the literature in general and the developing countries including Jordan. More specifically this has been tested in the higher education context where no other studies were been conducted, which make this theoretical framework unique contribution to the higher education institutions.

This study empirically contributes to the auxiliary existing literature, mainly to the conceptual of transformational leadership and employees' innovative behaviour directly and indirectly through the mediation of organizational culture, employees' work engagement, and employees' attitude toward change. This conceptualization usually effects employees' innovative behaviour positively and effect positively through the mediation of organizational culture, employees' work engagement, and employees' attitude toward change which represents a significant contribution of this research. This outcome of the study means that employees' innovative behaviour will surface if the higher educational institutions leaders can encourage and support the creation of a good culture, increase employees' work engagement, and spread employees' attitude toward change among their subordinates. Thus, the result of this study significantly contributes to the literature on organizational culture, employees' work engagement, and employees' attitude toward change's support of the relationship between transformational leadership and employees' innovative behaviour. It provides a better understanding of those relations in the higher educational institutes in the developing courtiers like Jordan which was not considered in literature of the pervious researches.

The organizational cultural role was found positive and significant towards the transformational leadership style theory. This positive and significant effect was argued in the literature on the context of the developed countries. However, this relationship was not discussed nor in the developing countries domain nor in Jordan benign part of the developing countries in discovering the role between transformational leadership and employees' innovative behaviour and or through the mediation of organizational culture, employees' work engagement, and employees' attitude toward change in the higher educational institutional in developing countries including Jordan. the outcome of this study confirmed a direct positive and significant relationship between the transformational leadership style and the employees' innovative behaviour, and discovered reveals an indirect effect that employees' work engagement, organizational culture, and employees' attitude toward change has a significant and positive role in the relation among transformational leadership and employees' innovative behaviour which indicated that whether we are researching those relationships at a developed or developing countries the organizational culture has a positive and significant effect on the transformational leadership style.

This research brings data form a relatively novel setting of culture, since most of the previous studies on this domain has been researched in developed countries that includes; Europe, USA, and Canada. This study is significant since it is the first study to empirically contributes to the auxiliary existing literature, mainly to the conceptual of transformational leadership and employees' innovative behaviour directly and indirectly through the mediation of organizational culture, employees' work engagement, and employees' attitude toward change in higher educational institutions context in the Arab countries.

### 6.3.2 The practical implications

The practical implications that stem from this research can be of benefit and of interest among scholars; leaders; policy-makers; practitioners; and experts to explore those factors which may play a positive and significant role in the relationship between transformational leadership style and employees' innovative behaviour specially in the higher education sector.

The outcome of this study sustained and supported the role of transformational leadership style of enhancing and assistance the employees' innovative behaviour in the higher education institutions, as transformational leadership style can affect positively the employees' innovative behaviour that leads to eventually to improve the growth and sustainability of those institutions. The results demonstrate the affirmative effect of transformational leadership in higher education institutions in Jordan for boosting employees' innovative behaviour. As higher education is a complex system it needs to be innovative, grow, compete, generates new ideas, renew and change in order to withstand the keen competition and the ever-changing demands that come along with today mounting challenges and globalization. Therefore, higher education institutions should promote and encourage the leadership transformational style in their higher educational institutions amongst academics and employees.

Providing training programs and seminars is one of the ways to post transformational leadership style amongst higher education institutions management can be one of the practical implications of this study. Transformational leadership can be developed through focusing on training programs (Chen et al., 2012). Thus, higher education institutions in Jordan need to implement transformational leadership training courses, seminars, sessions, workshops, conferences, and any other activities to enrich the promote this crucial leadership style so as to boosts transformational leadership style as an interpersonal skill that they require to boost innovative behaviour across the whole institution employees.

As part of the higher education institutions strategy, leader should promote employees' innovative behaviour in the institution, they can design or redesign the nature of the work to offer more freedom and empowerment, in addition to the needed support. They can also work in recruiting leaders with transformational leadership style characteristic to develop employees' innovative behaviour in their institutions.

the effect of transformational leadership on employees' innovative behaviour through the mediation of organizational culture, employees' work engagement, and employees' attitude toward change in it is higher educational institutions was positive and significant in this study. The important role of organizational culture as a mediator in the transformational leadership- innovative behaviour relationship implies that leaders in the Jordanian higher education institutions need to expand efforts on enhancing their organizational culture sitting. The finding of this study showed that employees' innovative behaviour requires enhancing organizational culture. Therefore, leader need to design strategies and activities aimed to encourage creating a positive organizational culture in order to enhance the employees' innovative behaviour. Employees' work engagement also plays an important role as a mediator in the transformational leadership- innovative behaviour relationship implies that leaders in the Jordanian higher education institutions need to expand efforts on enhancing their employees work engagement attitude. The finding of this study showed that employees' innovative behaviour requires enhancing work engagement commitment towards their institutions. Therefore, leader need to design strategies and activities aimed to encourage creating a work engagement culture in order to enhance the employees' innovative behaviour. Improving employees' work engagement can be done by giving attention to employees both to the aspects of their performance and personal matter as well. higher education institutions can arrange a comfortable and attractive work environment, giving rewards to outstanding employees and teachers or

engage them in social and entertaining activities, to name a few. This approach will develop a positive attitude from employees to be more engaged in completing their work. Moreover, the role of employees' attitude toward change plays an important role as a mediator in the transformational leadership-innovative behaviour relationship suggests that leaders in the Jordanian higher education institutions need to expand efforts on enhancing their employees' attitude toward change. The finding of this study showed that employees' innovative behaviour requires enhancing employees' attitude toward change of their institutions. Therefore, leader need to design strategies and activities aimed to encourage creating employees' attitude toward change culture in order to enhance the employees' innovative behaviour.

### 6.3.3 Methodological implications

This study has a methodological implication alongside the theoretical and practical implications. The researcher argue that the presented framework of this study is the first framework that includes the mediation of organizational culture, employees' work engagement, and employees' attitude toward change to examine the impact of the relationship between transformational leadership and employees' innovative behaviour in higher educational institutions context in Jordan. Also, it's the first framework that includes the mediation of organizational culture, employees' work engagement, and employees' attitude toward change to examine the impact of the relationship between transformational leadership and employees' innovative behaviour in higher educational institutions outside the western culture and the developed countries, specifically in Jordan. The cultural background of the people of Jordan is different from that of western and developed countries people. Therefore, the testing of this framework may provide additional input in the existing literature. For this study, the results supported earlier literature and contributed

to the literature of the positive and significance effect of transformational leadership on employees' innovative behaviour through the positive and significance mediation of organizational culture, employees' work engagement, and employees' attitude toward change in general and in the higher educational institutions, particularly in Jordan in similar way across both western and non-western cultures.

This study reached and supports validity and reliability of the framework that constructed that measure the effect of transformational leadership on employees' innovative behaviour through the mediation of organizational culture, employees' work engagement, and employees' attitude toward change in general and in the higher educational institutions in Jordan as a new geographical area that provides a valuable example of methodology framework which academics and researchers may use to test the impact of transformational leadership on employees' innovative behaviour in other similar studies. In addition, the use of the quantitative method approach findings could be a worthy way to answer some questions of other studies similar to this one.

#### **6.4 Research limitations**

Despite the significant contribution to the body of knowledge on the role of transformational leadership on employees' innovative behaviour and the effect of transformational leadership on employees' innovative behaviour through the mediation of organizational culture, employees' work engagement, and employees' attitude toward change, this study has its limitations and as all of the studies it always offers agenda for future researches. This research has a limitation in terms of the scope as it studied once sector in one country, it studied the higher educational institutions in Jordan only. Hence, the study findings cannot be generalized in all sectors nor for all countries. In terms of methodological approach. It also has limitation as the study used the surveys questionnaires

method to collect the primary data, which presumes that the participants of this surveys answered the questionnaires in truthful manner that represents the participants approaches and handlings. Another limitation can be viewed that the as the researcher studied the role of transformational leadership style on employees' innovative behaviour only which my effect the generalization of it.

The geographical area of this study was limited to developing countries, namely Jordan. Therefore, finding of this study may not generalized to other developing countries, nor to the rest of the world, due to culture differences that could lead to distinctive context and dissimilar influences. Therefore, for validity, additional studies using the same proposed model could be extended to another culture and another country which could lead to different outcome.

This study has also another limitation in term of leadership styles, it was limited transformational leadership style as a direct enabler for employees' innovative behaviour and as an indirect enabler through the mediation of organizational culture, employees' work engagement, and employees' attitude toward change in higher educational institutions within developing countries. It did not consider other enablers that may be crucial to employees' innovative behaviour

The methodological method of quantitative that was used is also may have some limitation. The argument of using a mix method for that study have been discussed amongst scholars over the time, they argue that the use of mixed methodology can presents a better outcome than using only one method, as the use of the mixed methods can increase the participates response rate in addition to counterbalance the weaknesses of using only one method. Another limitation is emerged from this study in terms of data sampling, as the samples of the questionnaire survey was limited to the higher education institutions only. The study examined the mediating effect of organizational culture, employees' work engagement,

and employees' attitude toward change and did not research the moderation effect of those relations.

In addition. The participant's background was mostly from the same in terms of age, gender, skills and education, therefore this is considered a limitation of the research as well. Thus, additional studies should examine a more age, gender, and educational backgrounds of participants to explore if the result will support the outcome of this study or not.

### **6.5 Recommendations for Future Research**

Various recommendations and researchers the researcher believe can be developed in light of this study results and findings. Those proposed recommendations can be considered and implemented by scholars; leaders; policy-makers; practitioners; and experts to explore those recommendations which may play a positive and significant role in enhancing their employee's innovative behaviour.

This research highlighted the need of developing transformational leadership style in both public and private higher educational institutions in Jordan in order to enhance the employees' innovative behaviour. Therefore, the researcher recommends providing training programs and seminars is to post transformational leadership style amongst higher education institutions management.

The finding of this study showed that boosting employees' innovative behaviour requires enhancing organizational culture, employees' work engagement, and employees' attitude toward change of their institutions. Therefore, the researcher recommends that higher educational institutions leader to design strategies and activities aimed to encourage those factors in order to enhance the employees' innovative behaviour.

The researcher recommends research the role of transformational leadership on employees' innovative behaviour and the effect of transformational leadership on employees' innovative behaviour through the mediation of organizational culture, employees' work

engagement, and employees' attitude toward change in other private and public sectors across Jordan to discover if the results of the research can apply in other domains or not.

The study did not investigate the differences between the public and private higher educational institutions in Jordan. Therefore, the researcher recommends additional studies to investigate differences between them in regards to the universities management, gender diversifications, procedure, set up, or any other related matter which my presents alternative results.

The study did not consider the religious and social factors that is imbedded in the Jordanian context which could be considers as a unique environment. Therefore, the researcher recommends additional studies to investigate those factors and any other related matters that may presents different results.

The primary data of this study was obtained from only a one public and private universities in Jordan. Therefore, recommendation of conducting additional studies that covers all higher educational institutions in Jordan may presents distinctive results or may support the existing results whereby the outcome of this study could be generalized.

The theoretical framework model created by the researcher could be implemented in other countries and sectors including the higher educational institutions as well. The researcher recommends to examine the role of transformational leadership on employees' innovative behaviour and the effect of transformational leadership on employees' innovative behaviour through the mediation of organizational culture, employees' work engagement, and employees' attitude toward change in other private and public sectors across the developing countries to test and compare the result outcome.

The theoretical framework model created by the researcher applied a limited choice of selective variables and data collections. Thus, the researcher proposes future studies that consider other public and private higher educational institutions with existing and

additional variables of the research framework that may presents other results and outcomes.

The primary data of this study was obtained from only one source of data, namely survey questionnaire. For the data collection, the researcher conducted quantitative methodological style using a questionnaire survey method approach that is associated with deductive system that he administers by himself with a close-end questions to collect the needed data form a private and a public university in Jordan. The researcher proposes future studies that consider additional methodology such as qualitative-interviews so as to be able to better confirms the results obtained from the quantitative- questionnaire data.

The theoretical framework model created by the researcher applied could be expanded and developed to consider other factors that may affect the relationship between transformational leadership and employees' innovative behaviour that includes; proactive behaviour; proactive personality; pressure/workload; professional commitment; organizational commitment; and performance feedback.

Lastly, the review of the literature earlier exposed that only a few studies conducted in test the investigating the role of transformational leadership on employees' innovative behaviour and the effect of transformational leadership on employees' innovative behaviour through the mediation of organizational culture, employees' work engagement, and employees' attitude toward change. Thus, the researcher proposes future studies to be conducting in this area to enrich the literature in both developed and developing counties across varies sectors.

APPENDIX A  
SURVEY COVER LETTER

July, 2021

**Dear Participant,**

I am carrying out an academic study, looking at the role of transaction leadership in innovative behavior at higher education in Jordan, through the eye of academic and non-academic staff.

This questionnaire should take no longer than 10-15 minutes of your time to complete. You are under no obligation to answer any of the questions you are not comfortable with, or to complete the full questionnaire: however please answer all questions as honestly as possible.

Please note that all informational provided will be kept strictly confidential and under full anonymity and will be used only for the academic study.

Thank you very much for your time and support.

**Yazan Hatamleh,**

عزيزي الكريم

انا بصدد عمل استبيان لقياس دور القيادة التحويلية في خلق الابداع الوظيفي بالجامعات الاردنية من وجه نظر العاملين بالجامعات من اكاديميين و اداريين.

هذه الاستبانة يتوقع ان لا تستغرق اكثر من 10-15 دقيقة من وقتكم الثمين، علما بانكم غير ملزمين بالاجابة عن اية سؤال غير مريح بالنسبة لكم وايضا غير ملزمين بالاجابة عن كافة الاسئلة الواردة في الاستبانة ادناه الا انني ارجوا منكم التفضل بالاجابة بكل صدق وشفافية ما امكن

الرجاء العلم بان كافة المعلومات الواردة في هذه الاستبانة ستعامل بسرية كاملة ولن يتم الاطلاع عليها من قبل احد غيري ولغايات الدراسة العلمية فقط.

شكرا جزيلاً على وقتكم ومساعدتكم , وتفضلوا بقبول الأحرارم والتقدير

يزن حتامله

APPENDIX B

Survey Questionnaire for Employee

استبانة الموظفين

Employee Name: \_\_\_\_\_ Employee ID: \_\_\_\_\_

Line Manager Name: \_\_\_\_\_ ID: \_\_\_\_\_ University ID: \_\_\_\_\_

Please answer all items on this answer sheet. If an item is irrelevant, or if you are unsure or do not know the answer, leave the answer blank

الرجاء الإجابة عن الأسئلة التالية، في حالة أن السؤال غير مناسب أو أنك غير متأكد من الإجابة أن تترك الجواب فارغ

Not at all	Once in a while	Occasionally	Sometimes	Fairly often	Frequently	Always
لا مطلقا	نادرا	بعض الاحيان	احيانا	في اغلب الاحيان	كثيرا	دائما
1	2	3	4	5	6	7

**My line managers... مديري**

1- Re-examines critical assumptions to question whether they are appropriate يعيد فحص الافتراضات المهمة للتأكد من أنها مناسبة لبيئة العمل	1 2 3 4 5 6 7
2- Seeks differing perspectives when solving problems يبحث عن وجهات نظر مختلفة عند حل مشاكل العمل	1 2 3 4 5 6 7
3- Gets me to look at problems from many different angles يجعلني انظر الى المشاكل من عدة زوايا	1 2 3 4 5 6 7
4- Suggests new ways of looking at how to complete assignments يقترح طرق جديدة للنظر في كيفية تحقيق مهام العمل	1 2 3 4 5 6 7
5- Talks about their most important values and beliefs يتكلم عن اهمية قيمه ومعتقداته	1 2 3 4 5 6 7

6- Specifies the importance of having a strong sense of purpose يؤكد على أهمية وجود شعور قوي نحو تحقيق الاهداف	1	2	3	4	5	6	7
7- Considers the moral and ethical consequences of decisions يأخذ في الاعتبار العواقب الأخلاقية والمعنوية للقرارات	1	2	3	4	5	6	7
8- Emphasizes the importance of having a collective sense of mission يؤكد على أهمية وجود احساس مشترك برسالة الجامعة	1	2	3	4	5	6	7
9- Talks optimistically about the future يتحدث بتفاؤل عن المستقبل	1	2	3	4	5	6	7
10- Talks enthusiastically about what needs to be accomplished يتحدث بحماس عما يجب تحقيقه	1	2	3	4	5	6	7
11- Articulates a compelling vision of the future يقدم رؤية واضحة ومقنعة عن المستقبل	1	2	3	4	5	6	7
12- Expresses confidence that goals will be achieved يظهر الثقة بأن الأهداف سوف يتم تحقيقها	1	2	3	4	5	6	7
13- Instills pride in me for being associated with him/her .. يبعث في نفسي الفخر كوني مرتبط معه	1	2	3	4	5	6	7
14- Goes beyond self-interest for the good of the group <sup>[SEP]</sup> يتجاوز مصالحه الشخصية لأجل مصلحة الجماعة	1	2	3	4	5	6	7
15- Acts in ways that builds my respect يتصرف بطريقة تبنى احترامي	1	2	3	4	5	6	7
16- Displays a sense of power and confidence يمنحني الشعور بالقوة والثقة	1	2	3	4	5	6	7
17- Spends time teaching and coaching <sup>[SEP]</sup> يقضي وقتا في التعليم والتدريب	1	2	3	4	5	6	7
18- Treats me as an individual rather than just as a member of a group <sup>[SEP]</sup>	1	2	3	4	5	6	7

يعاملني كفرد مستقل وليس مجرد عضو ضمن مجموعة	1 2 3 4 5 6 7
19- Considers me as having different needs, abilities, and aspirations from others	
يعتبر أن لدي احتياجات وقدرات وتطلعات متميزة عن الآخرين	1 2 3 4 5 6 7
20- Helps me to develop my strengths	
يساعدني على تطوير نقاط القوة لدي	

### My behavior...سلوكي

1. I pay attention to issues that are not part of your work أنتبه لأشياء ليست من صميم عملي	1 2 3 4 5 6 7
2. I wonder how things can be improved أتساءل عن كيفية تحسين الأمور	1 2 3 4 5 6 7
3. I search out new working methods, techniques, or instruments أبحث عن وسائل وطرق وتقنيات جديدة للعمل	1 2 3 4 5 6 7
4. I generate original solutions for problems أخلق حلول جديدة للتعامل مع المشكلات	1 2 3 4 5 6 7
5. I find new approaches to execute tasks أجد طرق جديدة لتنفيذ المهام	1 2 3 4 5 6 7
6. I make important organizational members enthusiastic for innovative ideas أحاول أن أوثر على صانعي القرار لتبني أفكارا إبداعية	1 2 3 4 5 6 7
7. I attempt to convince people to support an innovative idea أحاول أن اقنع الناس لدعم الأفكار الإبداعية	1 2 3 4 5 6 7
8. I systematically introduce innovative ideas into work practices أعمل وبشكل منتظم على تقديم أفكارا إبداعية في العمل	1 2 3 4 5 6 7
9. I contribute to the implementation of new ideas أساهم في تطبيق الأفكار الجديدة	1 2 3 4 5 6 7
10. I put efforts in the development of new things أبذل جهدا في تطوير أمور جديدة	1 2 3 4 5 6 7

### I am at work?? كيف انت في بيئة العمل?

1. At my work, I feel that I am bursting with energy في العمل، اشعر بأنني مفعم بالحياة	1 2 3 4 5 6 7
2. I find my work that I do full of meaning and purpose	1 2 3 4 5 6 7

أجد قيمة وهدف في عملي الذي اعمله	
3. Time flies when I'm working يمضي الوقت بسرعة اثناء عملي	1 2 3 4 5 6 7
4. At my job. I feel strong and vigorous في عملي اشعر بالقوة والنشاط	1 2 3 4 5 6 7
5. I am enthusiastic about my job اشعر بالحماس اتجاه عملي	1 2 3 4 5 6 7
6. When I am working. I forget everything else around me عندما اعمل أنسي كل ما يدور من حولي	1 2 3 4 5 6 7
7. My job inspires me عملي مصدر الهامي	1 2 3 4 5 6 7
8. When I get up in the morning. I feel like going to work عندما استيقظ بالصباح اشعر بالرغبة للذهاب للعمل	1 2 3 4 5 6 7
9. I feel happy when I am working intensely اشعر بالسعادة عندما اعمل بشكل مكثف	1 2 3 4 5 6 7
10. I am proud on the work I do انا فخور بعملي	1 2 3 4 5 6 7
11. I am immersed in my work انا منغمس ومستغرق في عملي	1 2 3 4 5 6 7
12. I can continue working for very long periods at a time أستطيع ان اعمل لساعات طويله في عملي	1 2 3 4 5 6 7
13. To me my job is challenging بالنسبة لي عملي هو تحدي	1 2 3 4 5 6 7
14. I get carried away when I'm working اشعر وانا اعمل بأنني منساق في عملي	1 2 3 4 5 6 7
15. At my job. I am very resilient, mentally في عملي انا لين ومطواع عقليا	1 2 3 4 5 6 7
16. It is difficult to detach myself from the job من الصعب ان ابعد نفسي عن العمل	1 2 3 4 5 6 7
17. At my work I always persevere, even when things do not go well انا دائما ملتزم بعملي حتى عندما تسير الامور بشكل غير سليم	1 2 3 4 5 6 7

Please indicate the extent to which you agree or disagree with the statement on you and the university

الرجاء تحديد درجة قبولك أو عدم قبولك للعبارات التالية ادناه بالنسبة لك وللجامعة

Disagree strongly اعارض بشدة	Disagree اعارض	Disagree slightly اعارض قليلا	Neutral محايد	Agree slightly اوافق قليلا	Agree اوافق	Agree strongly اوافق بشدة
1	2	3	4	5	6	7

**At my university ... في الجامعة...**

1. At my university staff are encouraged to identify skills they need to adopt changes في الجامعة يتم تشجيع الموظفين على تحديد المهارات اللازمة لتطبيق التغيير المطلوب	1	2	3	4	5	6	7
2. We sometimes form informal groups on our own to solve problems with the university في بعض الاحيان تشكل مجموعات غير رسمية لإيجاد حلول لمشاكلنا داخل الجامعة	1	2	3	4	5	6	7
3. I am encouraged to solve problems with my colleagues before discussing them with my manager الاقى التشجيع لحل المشكلات مع زملائي قبل عرضها على مديري	1	2	3	4	5	6	7
4. I have the power to change things within my university عندي المقدرة على تغيير الأمور داخل الجامعة	1	2	3	4	5	6	7
5. I am constantly on the lookout for new ways to improve my life انا في بحث مستمر عن طرق جديدة لتحسن حياتي	1	2	3	4	5	6	7
6. Wherever I have been, I have been a powerful force for constructive change حيثما تواجد اكون قوة فاعلة للتغيير الايجابي	1	2	3	4	5	6	7
7. Nothing is more exciting than seeing my ideas turn into reality لا شيء يشعرنى بالإثارة أكثر من رؤية افكاري تتحول الى واقع	1	2	3	4	5	6	7
8. If I see something I don't like, I fix it عندما أرى اشياء لا تعجبني اعمل على تغييرها	1	2	3	4	5	6	7
9. No matter what the odds, if I believe in something I will make it happen عندما أومن بأي موضوع اعمل على تنفيذه بغض النظر عن كونه مختلف	1	2	3	4	5	6	7
10. I love being a champion for my ideas, even against others' opposition أحب أن أكون متصدر لأفكاري حتى مع المعارضين لها	1	2	3	4	5	6	7
11. I excel at identifying opportunities	1	2	3	4	5	6	7

انا أبداع واتفوق في البحث عن الفرص	1 2 3 4 5 6 7
12. I am always looking for better ways to do things	1 2 3 4 5 6 7
انت دائما ابحث عن طرق جديدة لعمل الأشياء	1 2 3 4 5 6 7
13. If I believe in an idea, no obstacle will prevent me from making it happen	1 2 3 4 5 6 7
إذا ما أمنت بفكرة فلا يوجد عائق يمنعني من تطبيقها	1 2 3 4 5 6 7
14. I can spot a good opportunity long before others can	1 2 3 4 5 6 7
أستطيع ان أجد الفرص الجيدة قبل ان يجدها غيري	1 2 3 4 5 6 7
15. People usually receive feedback on the quality of work they have done	1 2 3 4 5 6 7
في العادة يسألني الناس عن رأي في مدى جودة اعمالهم	1 2 3 4 5 6 7
16. People don't have any idea how well they are doing their job.	1 2 3 4 5 6 7
الناس لا يملكون اية فكرة عن انهم يؤدون اداء عملهم بشكل ممتاز	1 2 3 4 5 6 7
17. In general, it is hard for someone to measure the quality of their performance	1 2 3 4 5 6 7
بشكل عام يصعب على الآخرين تقييم جودة ادائهم	1 2 3 4 5 6 7
18. People's performance is measured on a regular basis	1 2 3 4 5 6 7
تقييم اداء الناس يتم بصورة مستمر	1 2 3 4 5 6 7
19. The way people do their jobs is rarely assessed	1 2 3 4 5 6 7
نادرا ما يتم تقييم اداء الناس	1 2 3 4 5 6 7

### عملي ... My job

1. I would be very happy to spend the rest of my career with this University	1 2 3 4 5 6 7
سوف اكون مسرورا إذا ما استمررت بالعمل في هذه الجامعة	1 2 3 4 5 6 7
2. I trust the university to meet my expectations	1 2 3 4 5 6 7

أؤمن بأن هذه الجامعة تحقق لي توقعاتي							
3. I feel a strong sense of "belonging" to my university اشعر بالكثير من الانتماء لهذه الجامعة	1	2	3	4	5	6	7
4. This university deserves my loyalty تستحق هذه الجامعة ولائي لها	1	2	3	4	5	6	7
5. I feel like "part of the family" at my university اشعر بأنني فرد من افراد العائلة في هذه الجامعة	1	2	3	4	5	6	7
6. I am proud to work for my university انا فخور كوني اعلم بهذه الجامعة	1	2	3	4	5	6	7
7. I feel "emotionally attached" to this university اشعر بأنني عاطفيا منتمي لهذه الجامعة	1	2	3	4	5	6	7
8. This university has a great deal of personal meaning for me تحمل هذه الجامعة مكانة كبيرة شخصية في نفسي	1	2	3	4	5	6	7
9. I really feel as if this university's problems are my own اشعر حقيقة بأن مشكلات الجامعة هي مشكلاتي	1	2	3	4	5	6	7
10. If I could do it all over again, I would choose to work in the HE profession إذا كان بمقدوري الاختيار من جديد سوف اختار مهنة العمل بالتعليم العالي	1	2	3	4	5	6	7
11. I definitely want a career for myself in the HE profession انا بالتأكيد اريد انا مهنة بالتعليم العالي لنفسي	1	2	3	4	5	6	7
12. I like the HE profession too much to give it up انا أحب مهنتي بالتعليم العالي لدرجة انني لا استغني عنها	1	2	3	4	5	6	7
13. The workload in my job is too heavy حجم العمل الذي احمله ثقيل جدا	1	2	3	4	5	6	7
14. I don't have enough time to get everything in my job done لا املك الوقت الكافي لأكمل كل المهام المطلوبة مني بالعمل	1	2	3	4	5	6	7
15. I never seem to have enough time to get my job done لا يبدو مطلقا بأنني املك الوقت الكافي لأداء مهام عملي	1	2	3	4	5	6	7

Please indicate how you would describe the organizational culture at your university on the following scales

الرجاء حدد أكثر ما يبين بيئة العمل في الجامعة حسب المقياس التالي										
Quality focused تركيز على الجودة	◀	1	2	3	4	5	6	7	▶	Quantity focused تركيز على الكم
Innovative ابداعية	◀	1	2	3	4	5	6	7	▶	Conservative متحفظة
Transparent شفافة	◀	1	2	3	4	5	6	7	▶	Questionable/Unclear غير واضحة
Social responsible ذات مسؤولية مجتمعية	◀	1	2	3	4	5	6	7	▶	Social irresponsible ليست ذات مسؤولية مجتمعية
Sustainable ثابتة	◀	1	2	3	4	5	6	7	▶	Wasteful مسرقة/مبذرة
Collectivist جماعية	◀	1	2	3	4	5	6	7	▶	Individualist فردية
Accommodating	◀	1	2	3	4	5	6	7	▶	Selfish

مساعدة	انانية
Result oriented موجه للنتائج	Process oriented موجه للأساليب
Employees focus مصلحة الموظفين	Employer focus مصلحة صاحب العمل
Gender equal مساووه بين الجنسين	Gender discrimination تحيز بين الجنسين
Fair عادل	Unfair غير عادل
Friendly ودي	Aggressive عدواني
Trust موثوقة	Mistrust/ distrust غير موثوقة
Respectful محترمة	Disrespectful غير محترمة
Democratic ديموقراطي	Bureaucratic بيروقراطي

**Finally, some general questions.**

1. What is your gender?  Male  Female
2. How old are you ?  
 Under 25  25 – 35 years  36 – 45 years  46 – 57 years  Over 57 years
3. What is your highest qualification?  
 Doctorate  Master  Bachelor  College
4. How long have you been working for the current university? (Example 1.5 Years)\_\_\_\_\_year(s)
5. How long have you been working in the educational field in general?(Example 5.7 Years):  
\_\_\_\_\_year(s)
6. What is your current position of employment?  
 Professor  Practitioner professor  Associated professor  Assistant professor  
 Lecturer  Assistant lecturer  Administrator  Administrator assistant  
 Other : \_\_\_\_\_

***Thank you very much indeed for your support!***

شكرا " جزيلاً لوقتكم ومساعدتكم

APPENDIX C  
INTERVIEW GUIDE

**Survey Questionnaire for Line Managers**

استبانة المدير

**Employee Name:** \_\_\_\_\_ **Employee ID:** \_\_\_\_\_

**Line Manager Name:** \_\_\_\_\_ **ID:** \_\_\_\_\_ **University ID:** \_\_\_\_\_

Please answer all items on this answer sheet for each employee in your department. If an item is irrelevant, or if you are unsure or do not know the answer, leave the answer blank

الرجاء الإجابة عن الأسئلة التالية عن كل موظف يعمل في دائرتك، في حالة أن السؤال غير مناسب أو أنك غير متأكد من

الإجابة أن تترك الجواب فارغ

Not at all	Once in a while	Occasionally	Sometimes	Fairly often	Frequently	Always
لا مطلقا	نادرا	بعض الاحيان	احيانا	في اغلب الاحيان	كثيرا	دائما
1	2	3	4	5	6	7

**This employee often ... هذا الموظف عادة ما ...**

1. pays attention to issues that are not part of their work ينتبه لأشياء ليست من صميم عمله	1	2	3	4	5	6	7
2. wonders how things can be improved يتساءل عن كيفية تحسين الأمور	1	2	3	4	5	6	7
3. searches out new working methods, techniques, or instruments يبحث عن وسائل وطرق وتقنيات جديدة للعمل	1	2	3	4	5	6	7
4. generates original solutions for problems يخلق حلول جديدة للتعامل مع المشكلات	1	2	3	4	5	6	7
5. finds new approaches to execute tasks يجد طرق جديدة لتنفيذ المهام	1	2	3	4	5	6	7
6. makes organizational members enthusiastic for innovative ideas يحاول أن يؤثر على صانعي القرار لتبني أفكارا ابداعية	1	2	3	4	5	6	7
7. supports an innovative idea	1	2	3	4	5	6	7

يحاول أن اقنع الناس لدعم الأفكار الإبداعية							
8.systematically introduces innovative ideas into work practices يعمل وبشكل منتظم على تقديم افكارا ابداعية في العمل	1	2	3	4	5	6	7
9.contributes to the implementation of new ideas يساهم في تطبيق الأفكار الجديدة	1	2	3	4	5	6	7
10. puts efforts in the development of new things يبذل جهدا في تطوير امور جديدة	1	2	3	4	5	6	7

**This employee often tries to ... هذا الموظف غالبا ما يحاول أن...**

1. adopt improved procedures to do his/her job يعتمد تطوير الطرق لأداء العمل	1	2	3	4	5	6	7
2. change how his/her job is executed in order to be more effective يغير طريقة تنفيذ العمل ليصبح أكثر كفاءة	1	2	3	4	5	6	7
3. correct a faulty procedure or practice يصحح الظروف والوسائل غير الفعالة	1	2	3	4	5	6	7
4.bring about improved procedures for his/her work unit or department يعمل على تطوير طرق العمل في الدائرة التي يعمل بها	1	2	3	4	5	6	7
5. institute new work methods that are more effective for this department يؤسس لطرق عمل أكثر كفاءة في الدائره	1	2	3	4	5	6	7
6. eliminate redundant or unnecessary procedures يزيل اية وسائل غير ضرورية للعمل	1	2	3	4	5	6	7
7.change organizational rules or policies that are non-productive or counterproductive يغير اية لوائح أو اجراءات غير ضرورية أو معيقه للعمل	1	2	3	4	5	6	7
8. make constructive suggestions for improving how things operate within this organization يقترح اقتراحات بناءة لتحسين اجراءات العمل في الدائرة	1	2	3	4	5	6	7
9. implement solutions to pressing organizational problems يطبق حلول لتخفيف مشاكل الدائرة	1	2	3	4	5	6	7

*Thank you very much indeed for your help!*

شكرا " جزيلا لوقتكم ومساعدتكم

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