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Leadership as a Driver of Employees' Innovation Performance: The Mediating Effect of Cultural Diversity in UAE Universities

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Abstract

The aim of this research was to look into the relationship between leadership; transformational leadership, transactional leadership, and employee innovation, as well as the mediating impact of cultural diversity between leadership and employee innovation. Structured questionnaire was used to collect the data from 633 public and private universities' employees in the United Arab Emirates (UAE) with the help of the stratified sampling technique, and hypothesis verified through structural equations modelling (AMOS-21). Findings of the study shows that leadership has positive impact on employee innovation and cultural diversity partially mediates the relationship between leadership and innovative performance of UAE universities' employees. Practical implication of the study is to understand how universities can enhance their employees' innovation which is crucial for their competitiveness and survival. Moreover, the increasing prevalence of cultural diversity, as work arrangements in universities, raises the question of how to successfully manage employees. Although few studies have looked into how transformational and transactional leadership styles affect employees' innovation performance, this study expands on the topic by concentrating on sub-dimensions of leadership that foster innovation through idea generation and execution at the United Arab Emirates universities. This study offers valuable insights for educational leaders and throws light on the main characteristics of leadership which helps the employees to perform better in terms of innovation.

Keywords: Transformational Leadership, Transactional Leadership, Employees' Innovation, Universities, UAE

JEL Classification Code: M12, O31, O33

1. Introduction

In recent times, fast changes and modifications have taken place in the corporate world (Paquette & Messier, 2010). Corporates are progressively adopting

innovative approaches which has helped then to sustain as well as develop (Ferrante et al., 2014). Innovation refers to the practise of consuming and handling newly gained knowledge or operating in a way to attain latest procedures, facilities, and knowledge (Poor & Lebody, 2017). Innovation can be measured as a crucial facet for the success and development of an organization. Similarly, innovation can be expressed as the basic strenght of an organization (Liu et al., 2014), specifically, the skill of an organization is to generate new knowledge and execute appropriate knowledge and concepts of creativity to attain market value effectively (Leutner, et al., 2014). Furthermore, the study of Wonglimpiyarat (2017) mentions that the skills used in an organization brings improvement and changes in the currently used technologies. Numerous businesses pursue innovation capabilities in a particular way to attain valuable outcome, expand their earnings and attain greater execution (Christensen et al., 2016). Numerous studies have showed the relationship among employees' innovation and discovered that innovation is an essential aspect within organization's achievement (Sok et al., 2013).

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In the universities, innovative culture has a vital role to bring in the essential changes in universities (Scheffran et al., 2012). Research has indicated that innovative culture can be used to understand innovative concepts in educational sector (Zhu, 2015). Innovative culture can enable effective distribution of materials for learning, improve accommodating independent modes of learning from different places, and can assist in absorbing different contents from different communities which can be helpful in using interactive channels to enrich the organizational culture towards technology (Zhu, 2015). Educational sector particularly in UAE gives a lots of attention towards employees' innovation as it considers it crucial for development and success. Cultural diversity around the globe is witnessing speedy growth, and rivalry for talent is a major challenge, realizing this the establishments in UAE are engaged in making huge endeavours in order to employ and encourage innovation in the employees of universities (Mahbubani, 2013).

Present literature has revealed the links between leadership and employee innovation in two broad study scenarios, first of which involves investigative research on university students as respondents, while the other one is related to universities' employees who contribute to research as participants (Anderson et al., 2014). Study of Ahmad and Ejaz (2019), collected data from 364 university students in the United States and found that transformational leadership has only a minor impact on innovation. Similarly the study of Kahai et al. (2017), found weak leadership influences for the reason that respondent leaders in the study were not associates of their employees and had little or no past connections with them. This study will observe the impact of leadership styles on employees' innovation connecting leaders and employees.

Furthermore, when using a theoretical model, a researcher must consider that workers are a complex variable within an organisation. Employees' innovative success can be boosted by changes in leadership behaviour (Paais & Pattiruhu, 2020). In a study conducted by Carmeli et al. (2015), they found a significant connection between employee innovation and leaders' ability to handle current variations. Employees must possess the necessary leadership skills in order to be effective in their roles within the company (DuBrin, 2015).

Different results may be found in literature due to the effect of other influences on the relationship between leadership and employee innovation (Rusliati et al., 2020). According to the literature, there are a number of factors that influence the impact of leadership on employee conduct, including individual and organisational factors (Elbaz & Haddoud, 2017; Wang et al. 2017; Jaiswal & Dhar 2015). Particularly in this study, it was revealed that performing innovation depends on willingness and abilities of employees. An employee may possess the ability and the skill to adapt to the cultural changes and come up with new ideas;

can tolerate errors and accept others' opinions; enjoys the freedom of sharing valuable thoughts and have an ability to take considered risks; adapts to the changes and has the willingness to do things in new ways.

Innovation is a consolidated issue as a source of organisation's competitive advantage. This can be achieved if the organisations begin to develop or possess their innovation capabilities based on cultural diversity (Coccia, 2017). Several researches are available in literature that has focused on the executive leadership activity in organisations using theoretical and organisational models (Muenjohn & McMurray, 2014), but There is a paucity of evidence in literature examining the possible effects of leadership on employee innovation in organisations (Rauniyar et al., 2017), implying that there is a dearth of evidence for educational institutions in the UAE.

For last few decades, transformational leaderships has been a popular research topic. Studies in past on transformational leaderships has helped amass sufficient evidence that it improves performance of organization in the UAE (Nguyen, 2020; El Amouri & O'Neill, 2014). Past studies on transaction and transformational leadership focused on measures for performance such as profit margin, stock product performance and sales volume (Behery & Al-Nasser, 2016; Bealer & Bhanugopan, 2014). Moreover, further studies such as by (Hater & Bass, 1988; Barling et al. 2000) have focused on leadership towards commitment to their organizations and employees' satisfaction.

There are various types of leadership styles which may produce different effects on employees within an organization (Wang et al., 2014). Leadership used in organizational situations are proposed to encourage the employees towards innovation, who will be keen about their performance in the organization (Keskes, 2014). Similarly, innovation is important for the employees as it affects their performance and that of the organization (Malik & Butt, 2017). Innovation is the force that drives employees to achieve their aims (Anderson et al., 2014). Employee's innovation contains the elements that effort to do their best for organization (Sarooghi et al., 2015). Innovation is an important variable which supports employees' satisfaction and performance (Rego et al., 2015).

Among the cultural idiosyncrasies is significant to facilitate or either hinder the processes of employees' innovation performance (Towndrow et al., 2010; Aguinis & Roth, 2005). Past studies have focussed on changes in the environment of the educational institutions as an important element that affects instructional innovation. Hence, it creates a vital impact towards changes in educational institutions, to recognize innovation culture within institutions.

Among the various factors that influence innovation of employees are the employees' cultural diversity and

leadership behavior. As a result, this study will attempt to observe the relationship between leadership and employee innovation, as well as identify the mediation impact of cultural diversity on leadership and innovation in the United Arab Emirates.

2. Literature Review

Amabile (1997) and Befekadu and Feleke (2015) have found that innovation models play an important role in the work environment. To acknowledge innovative success, the model provided the employee's reputation and condition, as well as the relationship between various stages of the organisation (Woodman et al., 1993). Following these conceptualizations, discrete distinctions and the implications of social contexts have been examined in order to predict (Perry-Smith & Shalley 2003), innovation in various fields (Liu et al. 2017; Scott & Bruce (1994). Somech and Drach-Zahavy (2011) identified a mechanism for inducing innovative behaviour that incorporates significant factors of individual characteristics, work community, and leadership, which contributed to the theoretical circumstantial of this study.

Leadership is an important organisational feature that determines the social and work environment, and it was developed to predict individual innovation in various contexts (Mumford & Licuanan, 2004). The review of literature related to this topic has proven that leaders influence innovation in different ways, such as by raising people's basic motivation (Woodman et al., 1993), cooperation in the team, an emergence of a trustful partnership with mutual respect, approval and allocation of decision-making (Hutabarat et al., 2021; Volmer et al., 2012), and promoting strong ethical standards (Valentine & Prater, 2011). Despite the fact that top leaders focus on motivating individuals to engage in creative action, other studies have clearly shown that leadership abilities are linked to achievement and success. Some studies in literature investigated the effect of theoretical leadership models, which were designed to fix performance or organisational consequences rather than on employee innovation in an organisation, as well as these studies looked at the effect of theoretical leadership models, which were established to fix performance or organisational consequences rather than innovation (Valentine & Prater, 2011). This study aimed to close the gap by looking at the leadership qualities that are likely to influence employee innovation.

This research would also demonstrate how the organisational atmosphere and personal inventiveness affect employee innovation in the workplace. Employees who are aware of the organisational climate and how it affects employee creativity will be more successful in their innovative behaviour (Jaiswal & Dhar 2015), and their

response to leaders who encourage creativity (Muenjohn & McMurray, 2017). Individual empowerment is a behavioural construct associated with the recognition of problems, the development of new ideas, and their execution (Binnewies et al., 2007).

This study similarly separates employee's innovative performance in its theoretical models and examination. Innovative performance has been imagined as a multi-dimensional procedure (Dorenbosch et al., 2005), which contains different behavioral deeds, representing two main stages: innovation (De Jong & Hartog, 2010). However, academic studies mostly measured only one stage of innovative behavior (Zhang et al., 2011), in their empirical analyses (Volmer et al., 2012). Since, the individual's creativity and performance is a dependent on how innovative they are, investigation of the predictors of innovative behavior is crucial which will add to the existing knowledge of the subject (Slåtten et al., 2011). Like the study of De Jong and Hartog (2007), which used detailed survey of managers of different organizations in knowledge-intensive facility businesses to classify various leadership behaviors that prejudiced innovation of employees in organizations. The study reveals that combining innovation or concentrating only on one component will not help the researchers in understanding the specific leadership behaviors that were useful at any specific stage. It is good to separate innovation in order to understand the differences in respect to the leadership behaviors which promote innovation (De Jong & Hartog 2007). The results of this study is useful for the review of literature and for the capacity of employees' innovative performance.

2.1. Leadership and Employee Innovation

Leadership is a prominent aspect of the working atmosphere for workers, and it has a significant effect on employee idea development and problem-solving abilities (Cheung & Wong, 2011). Various theoretical perspectives have been established for identifying processes where leadership aids in motivating employee innovation. Transformational leadership has been shown to have a direct impact on employee innovation (Mumford & Licuanan, 2004). However, when working with the help of leaders, transformational leadership indirectly influences individual innovation in developed countries (Wang & Zhu, 2011). The leadership member exchange theory is empirically linked to this particular innovative phenomenon (Atwater & Carmeli, 2009). Subordinates' innovative behaviour is strongly linked to transformation leadership (Gumusluoglu & Ilsev, 2009).

Similarly, transactional leadership has a positive impact on the innovation behaviour of supervisor-follower dyads in service-related organisations such as travel agencies, hotels, restaurants, and banks (Cheung & Wong, 2011). In addition,

Zhang et al., (2011) found that leadership is strongly linked to innovation in a study of various service groups and workers from various Chinese organisations.

Employee creativity at work can be increased by providing greater job autonomy and interpersonal support, according to leader-members (Rego et al., 2012). Furthermore, fostering workers' perceptions empowers them to promote innovation (Scott & Bruce, 1994). Besides that, transactional leadership encourages employees' innovation and ethical practises by stimulating their ideals (Astuty & Udin, 2020). Transactional leaders provide a sense of psychological wellbeing, which encourages workers to make suggestions and come up with innovative ideas (Cheung & Wong, 2011).

Several researchers used a quantitative approach to analyse the leadership styles that are likely to impact employee innovation. A number of leadership behaviours have been documented, including tracking and consulting, classifying roles and goals, and unique leader behaviour that has a direct impact on employee idea generation (De Jong & Hartog, 2010). Certain leadership behaviours that have been linked to subordinate innovation include role modelling, empowerment, and delegation. (Gupta & Singh, 2013).

The survey and in-depth interviews were conducted in Hong Kong by Wong and Pang (2003). According to the findings, top-level management inspiration and guidance, as well as good coordination and engagement between staff and supervisors, are all important motivators for employee innovation. Significant factors that decide employee innovation include empowering the leader's behaviour, relying on consultation, collaborative decision-making, and upholding the employee's autonomy (Gupta & Singh, 2013). Nagy (2014) found that leadership behaviour which imposes rituals and supervision resulted in a lack of effort and ingenuity among Romanian workers. However, workers were not involved with decision-making related to innovation.

Furthermore, job-related obstacles to innovation includes establishing laws and regulations, organisational bureaucracy, and conservative management styles (Wong & Pang, 2003). When taken as a whole, leadership behaviour has a significant impact on employee innovation. However, there isn't enough exploratory proof of leadership of creativity in the literature on this topic yet. According to these reports, it is unclear which leadership behaviour has a greater effect on employee creativity. In particular, the relationship between leadership and employee innovation in the UAE has yet to be empirically investigated.

Furthermore, research suggests that leadership behaviour is likely to be linked to employee innovation. Inside an organisation, creativity is described as the generation of new concepts that are then implemented in new goods, processes, and services (Krause, 2004). In this respect, adequate time and funding from the appropriate people within the organisation

are needed to introduce the innovative innovations that can lead to new business growth (Astuty & Udin, 2020).

Various studies have linked leader assistance to concept creation and implementation (Paulsen et al., 2009). Leaders' willingness to be supportive, polite, and patient with errors, as well as their proclivity to introduce creativity helps in nurturing workers. The beneficial relationship between innovation support and team innovation was verified by Gumusluoglu and Ilsev (2009). Employee expectations of being valued and understood, i.e. employee perceptions of being heard, engender an optimistic emotional reaction that is related to employee innovation behaviour (Cheung & Wong, 2011).

Leaders that encourage employee engagement have a positive impact on creativity (Krause et al., 2007). Somech (2006) drew a survey of 1292 people from 140 primary care teams, as well as 140 practise managers. According to the findings, participative leadership is strongly linked to team reflection, which influences creativity in highly functional teams.

Leadership behaviour grant the autonomy and freedom in decision making that has a great influence on employee's perception of change oriented organisations which enhance the innovation and implementation behaviour (Krause, 2004). Job autonomy is acknowledged as a factors that impacts the employee's innovative behaviour with the increase in their engagement (Astuty & Udin, 2020). Charismatic leadership has also been reported as a factor that enhance the employee's innovation through supporting the motivation and self-efficacy (Tierney & Farmer, 2002).

Such transformational leadership's dynamic qualities contribute to increased team innovation with a mission and vision, as well as fostering a sense of team loyalty and identity (Paulsen et al., 2009). Michaelis et al. (2009) found that transformational leadership has a positive effect on followers' innovation, especially their innovation execution behaviour.

Fraj et al. (2015) conducted a survey of 232 Spanish executives, managers, and owners and discovered that organisational skills do not primarily produce strategic advantages, but that realistic planning is the driving force behind innovation. Since the context of study is identical in terms of creativity and its place in industry (Chang et al., 2011), it has evolved into a classification system for various types of innovation (Enz, 2012; Nagy 2014).

Past studies on the subject of Human Resources such as by (Chang et al., 2011; Fraj et al., 2015) reveals employees' innovative ideas to increase the excellence of services and market processes, is one of the key causes of creativity (Kattara & El-Said 2013). If managers in an organisation optimise touchable programmes, it can be relatively simple to achieve innovation enhancements. Employees in the industries, on the other hand, are known as brand ambassadors

(Astuty & Udin, 2020), who are essentially suppliers of various services and models of customer insights after experiencing the service (López-Fernández & Rajagopal, 2018). For scholars, the literature calls for an analysis of the impact of workers and organisational environmental influences on productivity and innovation (Tsai et al. 2019). Effective innovation strategies have been linked to leadership styles and employee empowerment (Nagy 2014).

According to previous studies, employees' creative approaches are shaped by their interactions with coworkers and the corporate climate (Zhou et al., 2014; West & Sacramento 2012). Leaders provide a significant impact on personal innovation through securing coworker approval for innovative actions, articulating strategy, describing pieces and assignments, and providing motivating and inspiring tools (De Jong & Hartog 2007; Amabile et al. 2004; Politis 2005; Gupta & Singh 2013).

According to literature, transactional leadership seems to have a favourable association with creative behaviour in an organisation. According to the past studies employee creative behaviour and leader-participant interaction are related. With a sample size of 388 workers in the manufacturing sector in China, Zhou et al. (2014) discovered that authentic leadership has a substantial association with employee innovation. However, owing to a lack of scientific data regarding leadership characteristics that inspire and promote employee innovation, literature specific to UAE organisations is lacking. As a result, the report came up with the following hypothesis to fix this particular gap.

H1: Leadership and transformational leadership have a positive relationship.

H2: Leadership and transactional leadership have a positive relationship.

H3: Leadership has a positive relationship towards employee innovative performance.

H3a: Employee innovative performance has a positive relationship with idea championing.

H3b: Employee innovative performance has a positive relationship with idea implementation.

2.2. Cultural Diversity

Cultural diversity is also one of the most complex variables that impacts employees' innovative success in which their social and professional growth boosts rapidly. While some scholars agree that culture diversity is still a difficult problem in the UAE because of the diversity of ethnic and knowledge backgrounds, the workforce does not always feel at ease. However, it has a positive effect on learning new concepts, innovations, and technology focused on other people's knowledge and experiences. Furthermore, the importance of cultural diversity will be identified in this

proposed study for the enhancement of UAE employees' innovation capabilities.

Significant and productive partnerships between strategy, leadership, capacity building, innovation process, knowledge management, cultural diversity, and employee success have been identified, are uniform with the findings of Bouncken et al. (2016), Peretz et al. (2015), Naranjo-Valencia et al. (2016) and Al Saifi (2015). For instance, Bouncken et al. (2016) found that strategic planning was favourably linked to cultural diversity in a survey of 263 workers employed in machinery retail, shipbuilding, and transportation. According to the report, strategic planning behaviour has a positive impact on cultural diversity when it focuses on achieving success outside the job requirements and objectives.

This study's findings are close to those found by Peretz et al. (2015) in a study of 324 employees. According to the findings, there is a connection between cultural diversity and employee innovation. A deviation from the benchmark way of operating is a common feature of results (Porter & Kramer, 2019). Cultural diversity, according to Stephens and Carmeli (2016), is commonly associated with the advancement of innovation success since it involves moving beyond work. Cultural diversity favourably affects leadership for workforce creativity, according to Naranjo-Valencia et al. (2016), who analysed 289 workers in Spain. According to Naranjo-Valencia et al. (2016), cultural diversity entails perseverance in the face of adversity, and creative thinking necessitates massive dedication and commitment, which an individual with a high degree of multiplicity might be able to sustain.

According to this report, universities in the UAE with a diverse population are able to adopt leadership behaviours that encourage employee creativity. Despite the minimal impact of cultural diversity on leadership behaviour and employee innovation efficiency, the importance of this factor has been recognised in the related literature as a core prerequisite of leadership behaviour and employee innovation. Employee innovation should be applied and created as appropriate solutions to challenges in order to change the organization's cultural quo.

H4: Leadership is positively linked with the cultural diversity.

H5: Cultural diversity has a positive relationship with the employee innovation.

H6: There is a mediating effect of cultural diversity between the leadership and employee innovative performance.

2.3. Conceptual Framework

The significance of this research is that it is focused on transformational and transactional leadership, and has

been integrated into the analytical context for explaining workforce innovation. Furthermore, the novelty of this study is that it focuses on the mediating impact of cultural diversity. The conceptual framework is presented in Figure 1.

3. Methodology

This segment specifies an explanation for using quantitative approach in this study. It explains more about the use of a self-administered questionnaires in survey methodology as being suitable for collecting data from the sample of employees from the universities in UAE.

Based on the existing literature of transformational leadership, this study will develop a conceptual model based on theories to test the research hypotheses as discussed earlier. Hence, a quantitative method was carried out in this study to test the hypotheses. According to Creswell and Creswell (2017) quantitative approaches will be expressed as “a structured method for uniting deductive logic with defined empirical examinations of individual behaviour in order to find and verify a set of probabilistic causal laws that can be used to predict general patterns of human activity”.

Similarly according to Zehir et al. (2016), quantitative approach supports the scholars to create statistical proof on the depth of relationships among both dependent and independent constructs. Furthermore their study also highlights that the statistical outcomes deliver guidelines of relationships when joined with theory and literature. In the same way according to Redmond et al. (2008), measurement of the constructs in the conceptual and theoretical framework is an important part of research and is an essential feature of quantitative research design, therefore this study purposes to measure variables.

Although quantitative research design is incapable to create theory or deliver the in-depth clarifications of qualitative enquiry, some studies such as by (Amaratunga et al., 2002) discuss that it is able to prove the hypotheses and specify reliability and validity. Additionally, this methodology approach adopted in this study has been effectively used in the past studies of leadership and mainly those in innovation (Anggadwita & Dhewanto, 2016),

have also extensively used this method. In other words, the objective of this study is needed to empirically investigate the relationships among the variables, therefore this methodology is considered to be suitable.

A self-administered questionnaire has been adopted in the quantitative survey methodology, to collect data about the essential constructs suggested in the conceptual model. These constructs are transformational leadership, innovation with idea championing and idea implementation, and mediating role of technological and cultural diversity. These constructs were measured by multi items using 7-point Likert scales and has been adopted from previously tested scales.

3.1. Final Survey Sample Size

Saunders (2011) explains that sample methods can be divided into two categories, the first is the probability sampling and the second is the non-probability sampling. Probability sampling is typically used where the study’s overall validity is in jeopardy. The successful sampling should be 384 workers, according to Krejcie and Morgan (1970). However, since the previous study’s feedback average was 25%, the final sample size is 1536 (stratified sampling) (see Table 1).

3.2. Data Analysis Methods

The study has two key aims, one is to grow and try a hypothesized structural model to measure the relationships of leadership and employees innovation. The second was to determine the mediating effect of cultural diversity between leadership and employees’ innovation. Therefore, the study uses to analyse the preliminary data through Structural Equation Modeling (SEM). SEM is used for confirmatory factor analysis for measurement model and to test the hypothesis in structural model. This part of study explains as well as validate the usage of these particular techniques.

Structural Equation Modeling (SEM) used in this study in order to calculate direct and indirect special effects of

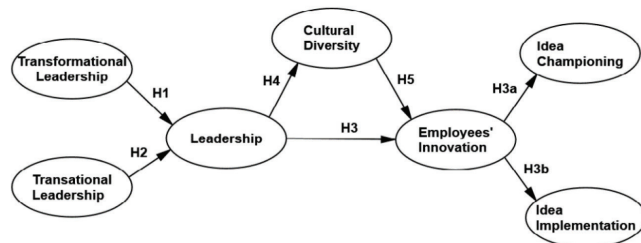


Figure 1: Conceptual Framework

Table 1: Sample of Universities’ Employees in UAE

Major Cities	Population of Universities’ Employees	Percentage	Sample
Abu Dhabi	74.029	34.36%	528
Dubai	83.168	38.60%	593
Sharjah	58.239	27.04%	415
Total	215.436	100%	1536

Table 2: Inter-Item Correlation

	1	2	3	4	5
Transformational	1				
Transactional	0.366	1			
Cultural Diversity	0.347	0.314	1		
Idea Championing	0.389	0.396	0.374	1	
Idea Implementation	0.367	0.294	0.378	0.393	1

leadership behaviors towards employees innovation and mediating effect of cultural diversity. SEM not only inspects the underlying relationship among different variables, it also concurrently inspects the relationships of the variables connected to models.

3.3. Rationale for Employing Structural Equation Modeling

The main objective of this study is to inspect leadership behaviour toward employees innovation with the interference of cultural diversity through a causal model. This model covers exact relationships between independent, dependent and mediating variables. Underlying relationships and complete fitness could be measured moreover through Path Analysis (CPA), or through Structural Equation Modeling (SEM). One of the main assumptions in Path Analysis is that variables being measured do not cover any inaccuracy then, it is normally considered as a feebler method (Field, 2013). In social sciences, such a supposition is unbearable (Meyers & Beretvas, 2006). In view of this restriction, SEM is normally a favored method in which the items of the scale are measured as a deep variable of the concept and adding of measurement mistake produces robust and dependable outcomes (Meyers & Beretvas, 2006).

Since SEM is inclusive of measurement and structural models, consequently, this multivariate method has the strength of both factor and path analysis. The measurement model signifies the factor analysis, though path analysis signifies its structural part. Therefore, in view of this mixture, it is possible in SEM to inspect the measurement model and structural relationships instantaneously (Hair et al., 2012).

3.4. Two Stage Structural Equation Modeling Approach

There are two technical methods which can be used in SEM, single-stage and two-stage. The dissimilar process of a single-stage method is that the measurement estimation and structural modeling are carried out at the same time. Whereas, in the two stage-approach, firstly measurement models are recognized and then dealings between the latent variables

are verified (Field, 2013). While together the methods are used in SEM, usually researchers give first choice to the two-stage approach meanwhile it decreases the probabilities of contact between measurement and structural models (Shammout, 2007). Furthermore, this two-stage method is usually carried out in the area of research (Field, 2013). In assessment of the directly above argued relative advantages, the two-stage approach will be used in this study.

The primary stage of SEM process included of founding the uni-dimensionality and reliabilities of each construct used. Uni-dimensionality might be dignified over CFA and similarly through Exploratory Factor Analysis (EFA). Though, CFA is usually chosen over Exploratory Factor Analysis (EFA) as the structure identified by EFA, influence not be that operational for CFA (Kline, 2015). In this study both EFA and CFA are used.

4. Results

4.1. Reliability and Discriminant Validity

According to Tarhini et al. (2016), “internal consistency signifies the extent to which respondents are reliable across the items mentioned in the questionnaire as a measurement scale”. Internal consistency is measured by Cronbach’s alpha, which is when 0.70 or above is considered as good (Pallant, 2013; Kline, 2015). The Cronbach’s alpha values for this study were: transformational (0.853), transactional (0.831), cultural diversity (0.845), idea championing (0.892) and idea implementation (0.903).

The association between all the structures used in this analysis is used to determine discriminant validity. Table 2 indicates that the discriminant validity findings for the association between the pairs of constructs are less than 0.85, as researchers recommend (Henseler et al., 2015).

4.2. Sample Characteristics

The demographic profiles of the respondents, including personal information, from a total of 633 available answers. There are 414 male respondents in the survey, accounting for 65.40 percent of the total population, while female respondents account for 34.60 percent. The respondents’ average age is 31–35 years old, with a ratio of 34.60 percent, 71.72 percent are married, and 71.24 percent of the sample has a monthly income of AED 10,000 or more. In terms of qualifications, respondents are well-educated, with 52.61 percent holding a master’s degree.

4.3. Confirmatory Factor Analysis (CFA) Results

Transformational and transactional leadership were the two constructs used to represent leadership conduct. After CFA, seven items reflected transformational leadership and seven

items represented transactional leadership. Confirmatory factor analysis was used on responses to 14 items, and the first model revealed a good fit based on the model fit criteria. All indicators are meaningful and loaded with more than the least standard value of 0.5, according to the single factor loadings (Hair et al. 2012; Field 2013). After CFA, five elements are kept from the cultural diversity construct, which has one factor. Employee innovation is also divided into two categories: idea championing and idea implementation; one item was eliminated during the CFA. The responses to these nine items were analysed using CFA, and the model that included these items matched the data well. The precise CFA results of all constructs are presented in Table 3.

4.4. Overall Measurement Model

As proposed by Sass et al. (2014) inspection of standardised residuals revealed that all residual values are below the threshold. Modification indices, on the other hand, revealed that the TF_10 (transformational leadership)

predictor has unacceptably high values. The overall model fit predicted a nice shape after iteratively eliminating such redundant item (see Figure 2). The findings demonstrated that the overall measurement model is well-fitted and generated, as RMSEA (0.033), chi square (706.108 with 633 df), GFI (0.945), AGFI (0.914), CFI (0.950) and CMIN/df (1.603). In summary, the CFA findings indicated that the overall measurement model is satisfactory.

4.5. Structural Model

Once all structures have been checked and an optimal match has been achieved (Kline, 2015; Sass et al., 2014), a structural model can be evaluated and obtained as a second and crucial stage of the study (Field, 2013). The structural model is specified as “the portion of the model that specifies how the latent variables are related to each other” (Field, 2013, p. 90). The aim of a structural model is to figure out which latent variables influence the values of other constructs directly or indirectly (Kline, 2015) (see Figure 3).

Table 3: Summarised CFA Results

Constructs	χ^2	df	CMIN/df	GFI	AGFI	CFI	RMESA	AVE
Transformational	24.691	7	2.048	0.971	0.934	0.975	0.068	0.651
Transactional	27.884	7	2.835	0.981	0.952	0.974	0.063	0.666
Cultural Diversity	24.842	5	2.024	0.962	0.923	0.972	0.064	0.628
Idea Championing	18.284	4	2.674	0.982	0.957	0.986	0.070	0.672
Idea Implementation	18.135	5	2.437	0.985	0.961	0.989	0.68	0.714

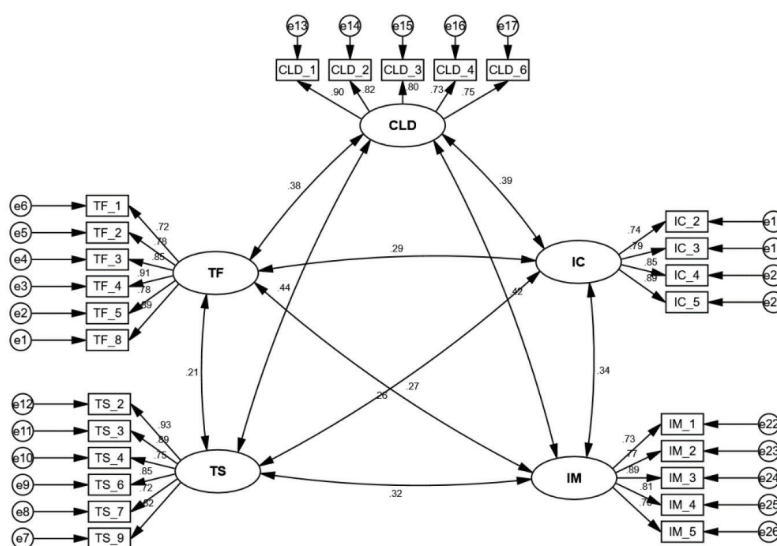


Figure 2: Overall Measurement Model

The findings demonstrate that the structure model is well-fitted, resulting in as RMSEA (0.037), chi square value (673.219 with 633 df), GFI (0.942), CFI (0.949), AGFI (0.909) and CMIN/df (1.784).

Standardised regression beta weights are represented by the values for the paths linking constructs with a single-headed arrow. The values at the boxes' edges are variance estimations, in which the sum of variance in the measured variables is interpreted by latent variables or causes, and the values next to the double headed arrows are correlations, much as in the measuring model.

Table 4 shows the results of this study's structural model assessment. The hypotheses H1, H1a, H1b, H2, H3, H4 and H5 are statistically significant and in the hypothesised direction when tested against the hypothesised model.

4.6. The Mediation Analysis

Hypothesis 6 (H6) tests the mediating relationship of cultural diversity with leadership and employees' innovation. The procedure for testing mediator as outlined

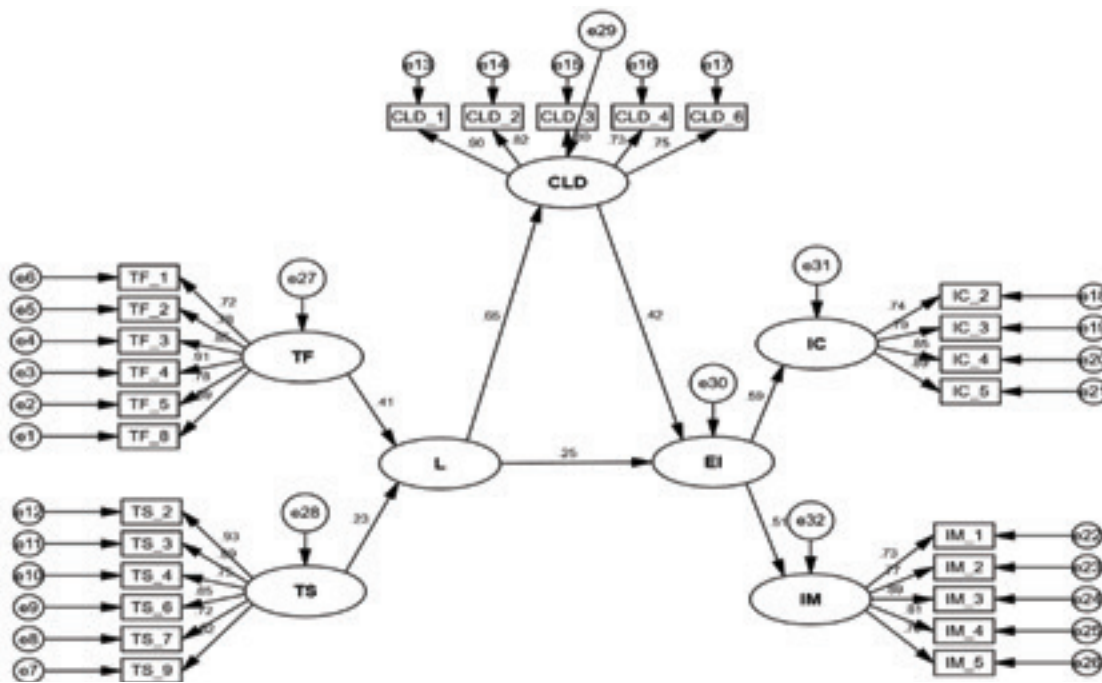


Figure 3: Structural Model Innovation

Table 4: Testing Hypotheses using Standardised Estimations

Hypothesised Path	Standardised Estimate	T-value	P-value	Result
H1: TF → L	0.41	4.914	***	Significant
H2: TS → L	0.34	4.042	***	Significant
H3: L → EI	0.25	3.554	***	Significant
H3a: EI → IC	0.59	6.043	***	Significant
H3b: EI → IM	0.51	5.541	***	Significant
H4: L → CLD	0.65	6.812	***	Significant
H5: CLD → EI	0.42	5.023	***	Significant

***p-value < 0.01; Significant at the 0.05 level.

by Awang (2015). In the model, the indirect effect is 0.28 ($0.66 \times 0.43 = 0.28$), while the direct effect is 0.26. Partial mediation happened when the indirect effect was greater than the direct effect. Since the direct effect of leadership on employee innovation is significant (see Figure 4).

The bootstrapping technique can be used to validate the outcome of every mediation test (Awang, 2015). The maximum likelihood bootstrapping protocol was used in this analysis, with a bootstrap sample of 1000 and a bias correction confidence interval of 95%. Table 5 shows the findings received. Hence H6; mediation effect is accepted.

5. Implications of the Research

The findings of this research had both realistic and theoretical ramifications. Primarily, this research refers to theoretical or observational research on the importance of cultural diversity in the advancement of employee innovation through leadership (Kamukama & Natamba, 2013). In reality, cultural diversity is an important aspect and a fundamental requirement. There has been no empirical studies on the advancement of workforce innovation through cultural diversity via leadership behaviours. As predicted in this report, it revealed the importance and impact of cultural diversity connections in concept production, as well as strengthened our understanding of how such ideas are implemented. As a result, this research serves as a basis for further investigation into the relationships between these principles.

Furthermore, a large number of workers in the company was unsuccessful. More active workers will not be eliminated if employees are strengthened to be productive and learn new skills. Employee trust and gratification may be boosted by leadership behaviours. For instance, as workers understand just what the organisation wants from them, they

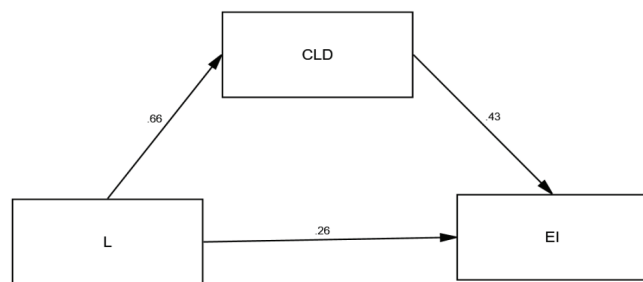


Figure 4: Mediating Effect

Table 5: The Results of Bootstrapping Procedure

Indirect Effect	0.28	p-value (0.001) Significant
Direct Effect	0.26	p-value (0.001) Significant

are more likely to be satisfied with their jobs. Leadership has the ability to expose workers’ strengths and open doors to job advancement, resulting in a salary hike and increased earnings.

6. Conclusion and Limitations

The research study combined the construct of leadership with cultural diversity, and employees’ innovation in universities’ employees in UAE. Evidently, the results of this study suggest that employees of universities in UAE are strongly influenced by the perception of innovation-enhancing leadership on employees’ innovation. Employee innovation refers to the process of putting innovative ideas into action, since leaders have more power at the implementation level than at the concept generation stage. Furthermore, data from the findings shows that since executives have a higher organisational status than workers, they would have more access to capital, which is a prerequisite for effective innovation. The results suggest that leaders who promote creativity will have a greater impact on employee innovation. The findings of the study show that transformational and transactional leadership styles inspire staff at UAE universities to be more innovative. The results also indicate that transformational and transactional leadership is a phenomena that empowers and assists workers, especially university employees, in becoming more imaginative and inventive within the company.

In UAE universities, it has been discovered that cultural diversity positively and greatly mediates the relationship between assumed leadership and innovation. According to the results, organisations with a high degree of cultural diversity are more open to innovative leadership than those without. More new thoughts, feedback, and disruptive practises emerged from the relationship between perceived innovation-enhancing leadership and cultural diversity within the organisation.

This study adds to our understanding of how leaders should inspire workers to innovate. It also included a discussion of how transformational and transactional leadership, cultural diversity influence workforce innovation in UAE universities.

As, this research adds to the body of knowledge on leadership and workforce innovation and showing practical implication, therefore it has some limitations which creates the opportunities for future research. First, different cultural contexts can disrupt the relations between employee evaluations of four organisations. Second, one of the most serious flaws in this research is the sample of this study used to choose the organisations. Third, reliance on material supplied by workers who are not open in reporting their leaders to an anonymous individual for fear of being revealed is a possible restriction.

Despite the fact that this study provided a paradigm that demonstrated an actual link between leadership and employee innovation, as well as the role of cultural diversity as a mediator, there are still some areas where future research is needed. For example, the findings of this analysis are restricted to academic institutions in the UAE, according to Banks (2015), and the findings can differ if other ethnicities are considered. It suggested the need for more observational research to determine if leadership styles work similarly or whether there is any exclusivity for UAE universities. Prasertchuwong (2015) argued that culture plays an important role in these relationships. More analysis is needed to broaden our interpretation of the structures used in this study by examining them in a variety of ways. This research has shown many research gaps in the field of leadership, especially in the area of employee innovation. Other aspects that scholars should consider, but are not limited to cultural diversity in their innovation process, which has a significant effect and impact on organisational activities.

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