

# **THE DYNAMIC LINK BETWEEN WORKPLACE CLIMATE AND EMPLOYEES' READINESS TO INNOVATE IN UAE PRIVATE SECTOR ORGANIZATIONS**

**Rasha Elshafea**

PhD student in Project Management, British University in Dubai, UAE

2014132014@student.buid.ac.ae

**Ahmad Rashid**

PhD student in Project Management, British University in Dubai, UAE

2014232175@student.buid.ac.ae

**Ala'a Abuhejleh** 

PhD student in Project Management, British University in Dubai, UAE

2013132116@student.buid.ac.ae

## **Abstract**

*This paper aims at understanding the role of work climate in influencing employees' readiness for innovation. The study consists of two core concepts: work climate and readiness to innovate. By surveying a sample of 104 employees working for the private sector in UAE, it investigates the impact of work climate on employees' readiness to innovate. The results reveal that employees' perceptions of their work climate tend to play a significant role in their readiness to innovate, with implications for both practitioners and researchers. An interesting finding is that employee skills and personality traits and nature of work play the most important role in employees' readiness for innovation. In addition, other factors of work climate like employee involvement, supervisor, peer relations and reward and development factors also showed positive relationship with the employees' readiness to innovate.*

**Keywords:** *Work climate, Innovation, Readiness to innovate, Human resource, UAE*

## INTRODUCTION

In addition to the technical and economic aspects of innovation, social dimension plays an important role in delivering successful innovation. Nowadays, a conducive and collaborative work climate is crucial to develop an innovative employee culture. Private organizations across UAE are challenged by increased pressure to deliver innovation in order to survive within a highly competitive market and to cope with UAE 2021 strategy of setting UAE as one of the most innovative countries in the world. The multi-party setup of organizations requires adoption of an effective work climate that foster introduction of a continuous stream of new ideas. This paper focuses on the social aspect and soft determinants of innovation through examining the link between work climate and employee readiness to innovate in the UAE private sector. The results of this study will assist UAE-based private organizations in understanding the work climate necessary to drive employees for innovation and therefore, contribute to UAE strategy implementation in becoming among the top countries in innovation field.

### Research problem

On 2014, the UAE ministry cabinet established the “National Innovation Committee” to implement and follow-up on the UAE “National Innovation Strategy” which includes thirty national initiatives for driving innovation across the country. More recently, the Cabinet announced the naming of 2015 as the “Year of Innovation” and provides recommendations to UAE organizations to revise their policies and create an environment for innovation that leads U.A.E. to become among top countries in innovation. As declared by Sheikh Ahmed Bin Saeed (Dubai economic counsel, 2014), President of Dubai Civil Aviation and Chairman of Dubai Airports and Emirates Airline and Group, innovation will be the focus of “UAE Vision 2021” which should lead the country to turn into a knowledge-based economy rather than being an oil-based economy. He added; the above target would be accomplished through enhancing work climate that encourages creative initiatives and growth. Thus, goal of UAE is to diffuse a culture of excellence and creativity that promote innovation in organizations. However, statistics in the UAE indicates a gap between the current and desired situation of innovative culture. For example, the number of patents granted to UAE per million people is below 1.5 compared to above 160 in Sweden. In a similar way, the number of journal articles published per million people for UAE is above 50 compared to above 800 in Finland (The International Organization for Knowledge Economy and Enterprise Development (IKED) 2010). In response to this current gap, Dubai government had adopted a proactive approach and launched three initiatives to foster innovation in the country. First initiative was the establishment of the “Mohammed Bin Rashid Centre for Government Innovation”. The second initiative was “Hamdan Innovation

Incubator” to assist entrepreneurs in executing their new projects and create work climate that can influence innovation. The third initiative was the strategic initiative “spirit of innovation in Dubai”. These initiatives in adopting innovation had made all UAE institutions across different sectors, both private and public to enter a restless phase of joined effort to speed up the innovation process within their boundaries and across the country.

Based on the above facts, the researchers decided to undertake a study to assess work climates factors in private organizations that are likely to influence employees’ readiness for innovation.

### **Research Objectives**

This study aims to analyze the role of work climate in modulating employees’ readiness to innovate in the private sector in UAE. The study also proposes a conceptual model that defines and investigates the relationship between various factors of work climate and employees’ readiness for innovation. The model will guide practitioners to determine the role of work climate in shaping employee innovation and government officials to identify work climate areas that need to be tackled to generate an innovative culture in the UAE.

### **Significance of the study**

According to many scholars, limited research has been conducted on the effect of organizational climate on employees’ readiness for innovation (Amabile et al, 1996; West and Anderson, 1996). Similarly, King et al (2007) claim that many studies focused on the effect of specific organizational climates on certain aspects such as: work-life balance and employee performance. Yet, limited research has been done on studying the effect of work climate on employees’ readiness for innovation. Moreover, the majority of the available research in this area was performed from a western perspective (Suliman, 2001) and primarily focused on the entire organization as the unit of analysis instead of considering individual systems from which innovations are generated (Downs and Mohr, 1976).

Therefore, this study is significant in studying the impact of work climate on innovative attitude at an individual level, in an Arabic context with a unique set of work climate factors as shown in the study conceptual model. Additionally, from a research perspective this study will add to the current literature through making possible cross-cultural comparisons between the western and Arab context with regards to the work climate and employee innovation relationship.

## Study limitations

There might be issue of generalizability as the study sample were limited to private sector employees from two emirates of the seven emirates in the UAE. Thus future research on different economic sectors and on other nations is required. Another limitation arouse from the difficulty in accessing official evaluation records with regards to employee readiness to innovate, thus a self-rated questionnaire was administered which may give rise to personal bias.

## LITERATURE REVIEW

This literature review is divided into three sections: impact of work climate on innovation, different models correlating work climate and innovation, work climate factors that influence employees' readiness to innovate.

### Impact of work climate on innovation

Dickson.j. (1983) defines work climate as the collective organizational internal environment that results from the behavior and policies of the organizational members; on the other hand, West (2004) explains innovation as the intentional development of new ideas and products that can lead to organizational benefits. Different authors explained the link between work climate and innovation like Buckler (1997) who confirms that innovation is a work environment that drives value creation and Amabile et al (1996) stated that perceived work environment affects organizational creativity and innovation.

According to Tesluk et al (1997), organizational climate can influence innovation through: socialization processes and development of shared norms between the organization employees. Hunter, Bedell & Mumford (2007) reviewed different studies on work climate assessments and its effect on innovation and they concluded that most work climate dimensions examined in earlier studies showed large impact on organizational innovation. Additionally, Amabile et al (1988) stated that innovative organizational climate include encouragement of employees to be independent and creative.

Therefore, organizational climate for innovation can be defined as the degree to which organization norms emphasize innovation (West and Anderson 1996). The more employees' perceive work climate as satisfactory and supportive for innovation, the more this will influence their readiness to innovate (Klein and Sorra 1996).

Based on the above-mentioned author views on work climate-innovation relationship we can conclude that organizations can stimulate the entrepreneurial spirit in their employees and drive their organization innovative capacity by creating a satisfactory work climate.

### **Theoretical models correlating work climate and innovation**

Many scholars have presented different models that correlate factors of work climate and innovation. For example, Denison and Mishra (1995) suggested four cultural traits that can improve organizational innovation and effectiveness: employee involvement, consistency, adaptability and sense of mission. Similarly, Schneider et al. (1996) stated four dimensions of climate that support innovation: nature of interpersonal relationships, nature of hierarchy, nature of work and focus of support and rewards. Schneider et al (1996) also claim that for an organization climate to support innovation, it should be communicative, decentralized and dynamic. A third model introduced by Martins and Turblanche (2003) implied five determinants of organizational climate that influence innovation: strategy, structure, support mechanisms, behavior that encourages innovation and communication.

In a more comprehensive model, Dombrowski et al (2007) observed eight elements of work climate that drives innovation: innovative mission and vision statements, a culture of democratic, lateral communication, forms of safe innovative environments, flexibility; collaboration across functions; sharing across business units, incentive schemes, and leadership. Finally, Isaksen & Ekvall (2007) identified the following nine creative climate dimensions: challenge, freedom, trust/openness, idea time, playfulness/humor, conflict, idea support, debate, and risk taking.

Although the above-mentioned models succeeded in defining different factors that can influence innovation; however their main focus was on organizational ability to innovate leaving more research space for studying the influence of work climate on employee readiness to innovate.

### **Work climate factors that influence employees' readiness to innovate**

Upon reviewing the literature; the authors identified the below six factors to be directly and specifically targeting employee readiness for innovation:

#### ***Nature of work***

The nature of work represents the work in general (challenging or routine) and the updated tools used to perform the work (Schneider et al, 1996). According to Demerouti et al. (2001) work includes different components such as: physical, social and structural components. These work components establishes work demands and work resources. Employees tend to be more innovative if their work demands are challenging rather than getting involved in routine and trivial assignments. Some previous studies showed positive relationship between the nature of work and innovation like West & Anderson (1996). However, this relationship is affected by work

challenge level and task clarity. In summary, employees will be innovative in responding to challenging work through changing their methods and approaches.

### ***Co-worker relationships***

Co-worker relationships refer to relationships among employees, departments, and management. These relationships could be based on rivalry or teamwork aspects (Schneider et al, 1996). The current trend of turning organization's mechanistic structure to organic and flat structures was highly motivated by ability of the organic model to encourage innovation through enhancing informal communication and building co-workers relationship. Moreover, Martins and Turblanche (2003) claim that cross-functional teams that allow for social networking among employees will encourage innovation.

### ***Rewards and development opportunities***

Rewards and development opportunities refer to the values and principles that employees recognize to be encouraged through the organization's systems (Ireland et al, 2006). Woodman et al (2006) claim that reward is a contributing factor for innovation in organizations. Similarly, Klein and Sorra (1996) believe that innovation can be improved through offering appropriate rewards systems. Furthermore, Arad et al (1997) claim that organizational values are mirrored in rewarded behaviors, where rewarding individual creative behavior makes the innovative attitude general to all employees and that personal development opportunities as well as professional growth have major impact on innovation.

Development opportunities also include providing training opportunities for employees on creativity and innovation management. Many studies emphasize the important of offering continuous training to employees on innovation aspects and thus unleashing their creativity and innovation powers. (e.g: Zhao, 2005; Klein & Sorra, 1996; Deppe et al, 2002; Kimberly & Evanisko, 1981; Weiss, 1997; Byrne, 2008). Similarly, Sung, S, & Choi, J (2014) emphasized that organizations' training and development investments affects innovative performance of employees through promoting learning practice.

### ***Employee skills and personality traits***

Humans are the true assets of any organization. Thus, the skills and traits of employees' can affect their innovation ability dramatically. Scholars identified many personality traits that can stimulate innovation such as: diverse interests, dynamism and persistence.

Ahmad (1998) suggested a set of traits that can affect innovation such as: the employee being knowledgeable, active, self-confident, comfortable with uncertainty, introvert and

analytical thinker. Thus employees' skills (both technical and human skills) and personal traits should be part of any conceptual model that attempts to understand the effect of work climate on employee readiness to innovate.

### ***Employee involvement***

Employee involvement refers to their engagement in the decision making process in matters related to their responsibilities (Schneider et al 1996). Many researchers found out that employee involvement and empowerment are direct factors that impact and sustain organizational innovation. (e.g: Strang & Meyer, 1993; Schneider et al, 1996; Cottam et al, 2001; Ahmed, 1998 ; Zhao, 2005; Johannessen, 1994 ; Prajogo & Sohal, 2003). Moreover, Burnside (1990) pointed out that innovation is influenced by the application of participative organizational structure. Similarly, Denison & Mishra (1995) claim that involved and empowered employees feel more motivated and self-confident in doing their jobs and thus show higher levels of innovation.

### ***Supervisor support***

Supervisors need to provide structured systems and emotional support to their employees for encouraging innovation. In brief, supervisors need to walk the talk when they are encouraging innovation and not only offering "lip service". According to Pervaiz (1998) supervisors should be aware about their impact on employees and their ability to tolerate ambiguity that comes with innovation. Additionally, Johannessen (1994) pointed out that supervisory style is critical where innovation is built on leading and supervising employees towards change acceptance.

Furthermore, supervisors need to apply an operating style that shows flexibility in accepting ideas and suggestions from their employees (National Audit Office 2006). Supervisors need to ensure open communication and apply open door policy to encourage employees to come forward with their ideas and innovations. Finally, Supervisors can support employee innovation in different ways such as: allocating funds for their "pet projects", changing policies, getting involved with employees during the innovation process and allowing brainstorming sessions for new ideas and products (National.Audit.Office, 2006; Cottam et al, 2001; Denison and Mishra, 1995).

### ***Summary***

Finally, based on the above literature review we can conclude that among other organizational factors that can drives innovation; creating an appropriate work climate is one of the most important pillars of innovation. Theoretical models and frameworks had tackled the work

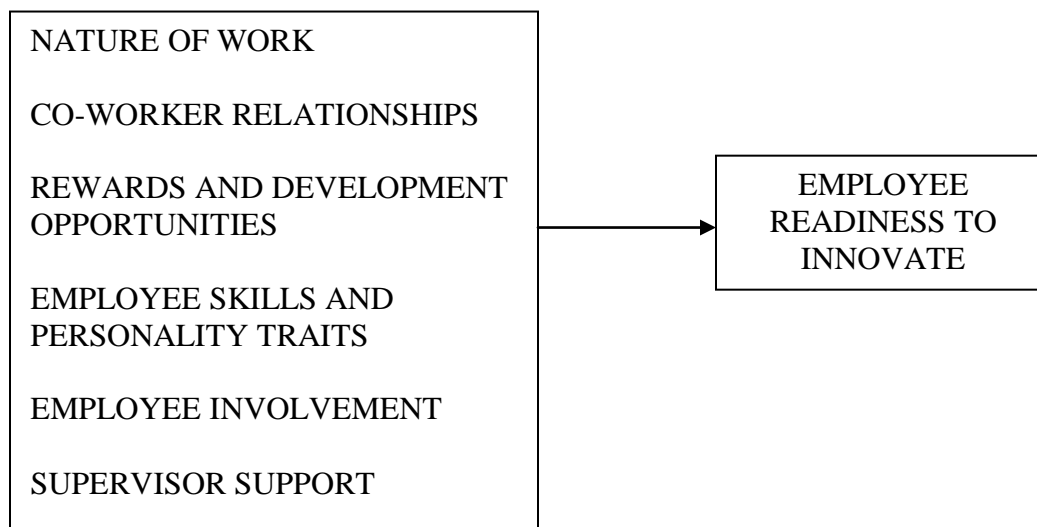


climate-innovation relationship and identified the correlation between different work climate factors (like organization structure, nature of work, organization strategy and vision) and employee readiness to innovate. However, they paid little attention to factors like employee skills, employee involvement, personality traits and supervisor support in shaping innovation. Thus, the authors had developed a conceptual model (figure 1) to identify the impact of those specific factors of work climate on employee readiness to innovate.

### Research conceptual model

Based on above-mentioned literature review; researchers of this paper were able to identify work climate as a global multidimensional independent variable with six work climate components; namely: nature of work, co-worker relationships, rewards and development opportunities, employee skills and personality traits, employee involvement, and supervisor support. All the above-mentioned factors are likely to influence employee readiness to innovate as a uni-dimensional dependent variable as claimed by Suliman (2001).

Figure 1. Research conceptual model



### Study hypotheses

Diverse set of Hypotheses was employed in the study to investigate the correlation between work climate along with its six facets and employee readiness to innovate. Hypotheses were based on previous literature and on the conceptual model of the study.

H1: Work climate will significantly influence employees' readiness to innovate.

H2: There is relationship of statistical evidence between nature of work and employee readiness to innovate.



H3: There is relationship of statistical evidence between supervisor and peerrelations and employees' readiness to innovate.

H4: Reward and development opportunities have significant relationship with employees' readiness to innovate.

H5: There is statistically significant relationship between employee skills and personality traits and employees' readiness to innovate.

H6: There is statistically significant relationship between employee involvement and employees' readiness to innovate.

## **RESEARCH METHOD**

### **The study**

To examine the link between work climate and employee readiness to innovate, the authors adopted quantitative research approach that ensures data validity and allows for result generalization from a sample of population (Sandures et al. 2012).

### **Study sample**

The authors employed random sampling method for primary data collection. The research instrument was a self-administered questionnaire submitted to employees working for the private sector in UAE at three different position levels within their organizations: first, middle and lower levels.

Ethical issues were taken into consideration while undergoing the research. For example, necessary approvals were taken prior survey distribution and all participants were briefed on survey purpose and participant rights. Anonymity of both organizations and participants were guaranteed and stated clearly in the questionnaire introduction. 125 questionnaires were distributed while the collected and completed questionnaires were 104 representing a high response rate of 83%.

### **Research instrument**

The research instrument was adapted from Suliman (2001) and submitted in English language only as all participants were employees from the private sector who have good command of English. The questionnaire used a five-point Likert's scale with the highest scale "strongly agree" 1 and lowest scale "strongly disagree" 5 as demonstrated in appendix 1.

The questionnaire was composed of 42 item distributed over three sections; namely: demographic characteristics, work climate (both work and individual factors) and employee

readiness to innovate. The instrument is designed to measure the six proposed factors of work climate multi-dimensional variable as well as the readiness to innovate as a uni-dimensional variable.

### **Data processing and analysis approach**

The collected primary data were analyzed by Statistical Package for Social Sciences (SPSS), version 22. The following seven items were recoded on SPSS as they were negatively worded questions in the study instrument: “there are rare opportunities to use my skills and abilities”, “there is a conflict among employees”, “I am not able to speak openly with my boss”, “there is rare chance to take part in deciding what the work method, activities and goals are”, “promotions and rewards are given on the basis of who you know rather than how well you do your job”, “I prefer to stick to established rules and procedures when doing my job” and “I use past solutions to solve day-to-day problems”. Subsequently data was subject to descriptive and inferential statistics.

## **ANALYSIS AND FINDINGS**

### **Descriptive statistics**

Table 1 shows demographic characteristics of the sample including: gender, marital status, education, age, the number of years the subject spent in the current organization, the number of years the participant acquire their current position, job status and nationality.

The demographic distribution has some distinct characteristics like higher percentage of males (69%) over females. It could be justified by the general dominance of males in one of the emirates under study since “statistics collected by the Dubai Statistic Centre show that 75.77 per cent of Dubai’s estimated population of 2.2 million are men, and 24.23 per cent are women” (Khamis, 2014). Similarly, our sample seems to be dominated with non-UAE nationals; 93% this could be explained by the general prevalence of expats in the private sector in the UAE, “Expats make up 99% of private sector staff in UAE” (Ashfaq, 2014). Thus future research on governmental organizations will augment our study and present a holistic approach for the work climate-innovation relationship. Other demographic characteristics shows that the age of 85% of the participants were between 25-46, again in line with the statistics of Dubai that indicates that two-third of the population is between 20-39 (Khamis, 2014).

Table 1: Demographic Characteristics

| Item             | Gender    | Marital Status | Education | Age       | y.in org  | y.in pos. | Job status | Nationality |
|------------------|-----------|----------------|-----------|-----------|-----------|-----------|------------|-------------|
| Male             | <b>72</b> |                |           |           |           |           |            |             |
| Female           | 32        |                |           |           |           |           |            |             |
| Married          |           | <b>75</b>      |           |           |           |           |            |             |
| Unmarried        |           | 29             |           |           |           |           |            |             |
| High school      |           |                | 3         |           |           |           |            |             |
| Graduate degree  |           |                | 35        |           |           |           |            |             |
| High diploma     |           |                | 19        |           |           |           |            |             |
| Masters or above |           |                | <b>47</b> |           |           |           |            |             |
| less than 25     |           |                |           | 4         |           |           |            |             |
| 25-35            |           |                |           | <b>54</b> |           |           |            |             |
| 36-46            |           |                |           | 31        |           |           |            |             |
| 47 and above     |           |                |           | 15        |           |           |            |             |
| 1 year or less   |           |                |           |           | <b>40</b> |           |            |             |
| 2 to 7           |           |                |           |           | 33        |           |            |             |
| 8 to 13          |           |                |           |           | 18        |           |            |             |
| 14 to 19         |           |                |           |           | 6         |           |            |             |
| 20 and above     |           |                |           |           | 7         |           |            |             |
| 1 year or less   |           |                |           |           |           | 36        |            |             |
| 2 to 7           |           |                |           |           |           | <b>42</b> |            |             |
| 8 to 13          |           |                |           |           |           | 12        |            |             |
| 14 to 19         |           |                |           |           |           | 9         |            |             |
| 20 and above     |           |                |           |           |           | 5         |            |             |
| First level      |           |                |           |           |           |           | 28         |             |
| Middle level     |           |                |           |           |           |           | <b>71</b>  |             |
| Lower level      |           |                |           |           |           |           | 5          |             |
| UAE National     |           |                |           |           |           |           |            | 7           |
| Non UAE national |           |                |           |           |           |           |            | <b>97</b>   |
| Total            | 104       | 104            | 104       | 104       | 104       | 104       | 104        | 104         |

### Validity test (Factor analysis)

In order to confirm the claimed multidimensionality of work climate global independent variable, the researchers conducted factor analysis to ensure instrument validity. The authors of this paper opt for factor loading above 0.5 based on Laher (2010) argument that factor loading above the 0.30 cut-off point are generally acceptable, but that 0.40 is preferable. Table 2 show the result of factor analysis which indicates that all items were successfully loaded and out of

the six components of work climate, four factors were loaded independently, however two factors; co-worker relationship and supervisor support loaded as one component. As described by Field (2009) through factor analysis we can reduce the factors to their underlying dimensions when they load together in the same component, therefore co-worker relationship and supervisor support were merged into a new variable named “supervisor and peer relations” reference to Shah and Ghulam (2010) who defined supervisor and peer relations as the perception of employees to their supervisor support and peer alignment. Based on this merge, research hypotheses had been modified and all further analysis were conducted on supervisor and peer relations instead of the initially suggested two factors of work climate in the conceptual model (figure 1); supervisor support and coworker relationship.

Table 2. Result of Factor Analysis

|   | Component |       |       |       |       |       |
|---|-----------|-------|-------|-------|-------|-------|
|   | 1         | 2     | 3     | 4     | 5     | 6     |
| Item 1 nature of work "I have variety of tasks"                                       |           |       |       | 0.828 |       |       |
| Item 2 nature of work "rare opportunities to use skills"                              |           |       |       |       |       | 0.59  |
| Item 3 nature of work "chance to do challenging work"                                 |           |       |       | 0.628 |       |       |
| Item 1 coworkers relationship "Friendly atmosphere"                                   | 0.801     |       |       |       |       |       |
| Item 2 coworkers relationship "Teamwork within company"                               | 0.653     |       |       |       |       |       |
| Item 3 Coworkers relationship "Employees offer to help"                               | 0.52      |       |       |       |       |       |
| Item 4 Coworkers relationship "conflict among employees"                              |           |       |       |       |       | 0.639 |
| Item 1 employee skills & pers. traits "try my utmost"                                 |           |       |       |       | 0.652 |       |
| Item 2 employee skills & pers. traits "try my best for the company"                   |           |       |       |       | 0.618 |       |
| Item 3 employee skills & pers. traits "interested in work"                            |           |       |       |       | 0.632 |       |
| Item 4 employee skills & pers. traits "proper skills& pers. traits d and training"    |           |       |       |       | 0.658 |       |
| Item 5 employee skills & pers. traits "know how to do my job"                         |           |       |       |       | 0.798 |       |
| Item 1 supervisor support "recognition for well done job"                             | 0.674     |       |       |       |       |       |
| Item 2 supervisor support "flexible boss"   | 0.755     |       |       |       |       |       |
| Item 3 supervisor support "unable to speak openly"                                    | 0.546     |       |       |       |       |       |
| Item 4 Supervisor support "personnel interest in employee"                            |           |       | 0.596 |       |       |       |
| Item 1 Employee involvement "rare chance to decide work methods"                      |           | 0.479 |       |       |       |       |
| Item 2 Employee Involvement "Emp. suggestions are asked for decisions affecting them" |           |       | 0.73  |       |       |       |

Tab 2 ....

|   |       |       |
|---|-------|-------|
| Item 3 Employee involvement "Imp. Decisions are made by the emp. closest to action"   | 0.797 |       |
| Item 4 Employee involvement "i take part in making decisions that affects my job"   | 0.814 |       |
| Item 1 Reward and Development Opportunities "pay increases with well done work"   | 0.632 |       |
| Item 2 Reward and Development Opportunities "chance for personal development"   | 0.558 |       |
| Item 3 Reward and Development Opportunities"receive enough training"  | 0.785 |       |
| Item 4 Reward and Development Opportunities"promotion and reward on basis of who you know"  |       | 0.559 |
| Item 5 Reward and Development Opportunities"reward on how well i do the job"  | 0.612 |       |
| Item 6 Reward and Development Opportunities"reward on how much i do the job"  | 0.62  |       |
| Rotated Component Matrix<br>Extraction Method:<br>Principal Component Analysis.<br>Rotation Method:<br>Varimax with Kaiser Normalization.<br>a Rotation converged in 10 iterations. |       |       |

### Reliability test (Cronbach Alpha)

All items of the research instrument were tested for reliability using Cronbach Alpha test and the authors agree on the lowest acceptable reliability value of 0.6 as claimed by Suliman (2001). The result of Cronbach Alpha indicates that 33 out of all 34 items were reliable and thus one item of dependent variable; readiness to innovate was omitted throughout the study (element 2). The final results yields reliability coefficient of 0.891, 0.885 and 0.738 for all 33 items, work climate variable and readiness to innovate variable respectively as shown in table 3. These reliability coefficients were sufficiently high to indicate a reliable instrument for the study.

Table 3: Cronbach Alpha Values

| Description                            | Value | Items | New Value After deletion | Items |
|--|-------|-------|--------------------------|-------|
| Nature of work                         | 0.621 | 3     | NA                       | 3     |
| Supervisor and peer relations          | 0.748 | 8     | NA                       | 8     |
| Employee skills and personality traits | 0.766 | 5     | NA                       | 5     |
| Employee involvement                   | 0.697 | 4     | NA                       | 4     |
| Reward and development opportunities   | 0.806 | 6     | NA                       | 6     |
| Global Work Climate variable           | 0.885 | 26    | NA                       | 26    |
| Readiness to innovate variable         | 0.661 | 8     | 0.738                    | 7     |
| Total items                            | 0.885 | 34    | 0.891                    | 33    |

## Hypothesis testing

The authors conducted correlation test, Paired-Samples T Test and regression analysis to investigate the statistical link between research variables as per the proposed hypotheses.

### Correlation test

Pearson correlation test was run for all variables included in the study; table 4 shows the correlation matrix. The results indicate a positive relationship between work climate along with its components and the dependent variable; employees readiness to innovate with a correlation coefficient ranging from 0.222 to 0.427.

Work climate and employees' readiness to innovate were significantly and positively correlated  $r = 0.375$  (Sig. level 0.000). This means that improved work climate conditions enhances employees' innovative attitude in the private sector in UAE. Nature of work ( $r = 0.354$ ), and the strongest of all; employee skills and personality traits ( $r = 0.427$ ) factors show highly significant (Sig. level 0.000) and positive relationship with employees' readiness to innovate. Whereas, supervisor and peer relations ( $r = 0.229$ ), reward and development ( $r = 0.263$ ) and employee involvement ( $r = 0.222$ ) show positive relationship at significance level .05.

Table 4: Correlation Matrix

|                                |                     | Global Work Climate | Nature of work | Supervisor and peer relations | Emp. Skills and pers. traits | Employee involvement | Reward and development |
|--------------------------------|---------------------|---------------------|----------------|-------------------------------|------------------------------|----------------------|------------------------|
| Readiness to innovate variable | Pearson Correlation | .375**              | .354**         | .229*                         | .427**                       | .222*                | .263**                 |
|                                | Sig. (2-tailed)     | 0.000               | 0.000          | 0.021                         | 0.000                        | 0.025                | 0.008                  |
|                                | N                   | 104                 | 104            | 104                           | 104                          | 104                  | 104                    |

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

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

### Regression analysis

To predict the impact of work climate and its component on employees' readiness to innovate, regression analysis was run on the global variables and then stepwise on all factors of work climate and the dependent variable as shown in table 5 and 6. Test results indicate a highly significant relationship between the global work climate as well as two of its component; nature of work and employee skills and personality traits and employees' readiness to innovate ( $p$ -value < 0.001). The global work climate variable managed to explain 13.2% of the variance in

employees' readiness to innovate. However, looking at the beta weights shown in table 6, it can be concluded that this impact is mainly influenced by employee skills and personality traits primarily; beta weight 0.352, influencing 17.4% of the variance of employee readiness to innovate followed by the impact of nature of work with beta weight 0.247, contributing to 11.6% of the change in employees readiness to innovate.

Table 5: Regression test results for global work climate and employees' readiness to innovate

| Regression equation  | F value and sig level | R square | Adjusted R square | Beta  |
|--|-----------------------|----------|-------------------|-------|
| Work climate variable regressed against employees' readiness to innovate | 16.37 (0.000)         | 0.141    | 0.132             | 0.375 |

Table 6: Regression test results for significant factors of work climate and employees' readiness to innovate

| Regression equation   | F value and sig level | R square | Adjusted R square | Beta  |
|---|-----------------------|----------|-------------------|-------|
| Employee skills and personality traits regressed against employees' readiness to innovate | 22.26(0.000)          | 0.182    | 0.174             | 0.352 |
| Nature of work regressed against employees' readiness to innovate                         | 15.411(0.000)         | 0.125    | 0.116             | 0.247 |

### Paired-Samples T test

In congruence with the results of the correlation test, Paired-Samples T test yields a positive relationship between the work climate and all its components with employee readiness to innovate at a significance level of 0.000 except for reward and development factor, the positive relationship was also maintained at significance level .05 as indicated in table 7.

Table 7: Paired -Samples T Test

| Paired Samples Correlations |                                   | N   | Correlation | Sig. (2 tailed) |
|-----------------------------|-----------------------------------|-----|-------------|-----------------|
| Pair 1                      | Global work climate               | 104 | 0.375       | 0.000           |
| Pair 2                      | Nature of work                    | 104 | 0.354       | 0.000           |
| Pair 3                      | Supervisor and peer relation      | 104 | 0.229       | 0.000           |
| Pair 4                      | Employee skills and peers. Traits | 104 | 0.427       | 0.000           |
| Pair 5                      | Employee involvement              | 104 | 0.222       | 0.000           |
| Pair 6                      | Reward and development            | 104 | 0.263       | 0.031           |



## DISCUSSION

When work climate was regressed against employees' readiness to innovate, the F test showed a significant model ( $P$  value  $< 0.001$ ) and coefficient of determination  $R^2 = 0.132$ , which coincides with the correlation and paired-samples T test results. The global work climate variable was highly related to the employee readiness to innovate with correlation coefficient 0.375 at  $p$ -value  $< 0.001$ . These results indicate that 13.2% of the change in employee readiness to innovate is modulated by work climate and thus it can be concluded that H1: work climate will significantly influence employees' readiness to innovate is established. These findings are consistent with previously conducted studies; for example, Suliman (2001) concluded that employees' perception to work climate plays a significant role in their readiness to innovate. Similarly Cottam et al. (2001) emphasized that organization climate is a fundamental step in the success of innovation.

The five factors of work climate were regressed against employee readiness to innovate and the F test showed significant regression model ( $P$  value  $< 0.001$ ) for both nature of work and employee skills and personality traits. The coefficient of determination  $R^2$  was 0.174 and 0.116 for employee skills and personality traits and nature of work respectively. This finding indicates that nature of work and employee skills and personality traits explain 11.6% and 17.4% of the change in employees' readiness to innovate. In a similar way, correlation and paired-samples T test yield  $r = 0.427$  and  $r = 0.354$  at  $p$ -value  $< 0.001$  for both employee skills and personality traits and nature of work respectively indicating, that among all work climate factors the highest impact was from those two components. This means that employees' engagement in an innovative and creative behavior is heavily shaped by personal skills and the nature of their work and thus it can be concluded that H2: There is relationship of statistical evidence between nature of work and employee readiness to innovate as well as H5: There is statistically significant relationship between employee skills and personality traits and employees' readiness to innovate are supported. With regards to this fact, King et al. (2007) had previously emphasized the same concept by arguing that promotion of innovation is related to employees' ability to change. Similarly, Tidd and Bessant (2009, p115) claim that: Whereas innovation is often seen as the province of specialists in R&D, marketing, design or IT, the underlying creative skills and problem-solving abilities are possessed by everyone. If mechanisms can be found to focus such abilities on a regular basis across the entire company, the resulting innovative potential is enormous.

According to correlation test and Paired-samples T test supervisor and peer relations, reward and development, as well as employee involvement still plays a role in changing employee readiness to innovate showing correlation coefficient of 0.229, 0.263 and 0.222

respectively. However, this role is humble compared to other factors as nature of work and employee skills and personality traits. Therefore, H3: There is relationship of statistical evidence between supervisor and peer relations and employees' readiness to innovate H4: Reward and development opportunities have significant relationship with employees' readiness to innovate and H6: There is statistically significant relationship between employee involvement and employees' readiness to innovate are all confirmed. Those findings were previously supported by Shah and Ghulam (2010) claiming that supervisor's behavior and peer relations are crucial for innovation, job satisfaction and improvement. With regards to the reward and development opportunities, Suliman and Harethi (2013,p.419) also supported their positive relationship with innovation, claiming: The factors of work climate: performance-reward relationship, satisfaction with appraisal, performance feedback and superior-subordinate relationship are related strongly to the factors of performance, namely understanding working duties, work skills, work enthusiasm and innovation.

## CONCLUSION AND RECOMMENDATIONS

According to the literature review, employee readiness to innovate can be influenced through work climate factors. A set of hypotheses were employed in this paper that relates a number of work climate factors; namely: nature of work, employee skills and personality traits, employee involvement, supervisor and peer relations as well as reward and development opportunities with employees' readiness to innovate. The findings of this paper revealed that organizational work climate could be critical predictor of employees' readiness to innovate. Highly significant links were found between employees' readiness to innovate and work climate along with two of its components; namely employee skills and personality traits and nature of work. Other factors of work climate like employee involvement, supervisor, peer relations and reward and development factors also showed positive relationship with the employees' readiness to innovate. Thus it can be concluded that employees in the UAE can develop their innovation readiness on the base of work climate factors.

Given these findings, from both research and practical perspectives, it is important to consider how organizations can alleviate their employees' capacity and ability to innovate through paying attention to work climate factors. Therefore it is recommended that managers create an environment that unleashes employee abilities to innovate. The way in which supervisors exercise management skills is also important and thus training programs for supervisors on communication and management skills will serve the goal of improving supervisor and peer relations and thus encouraging innovation.

Future research needs to explore correlation between work climate and employees' readiness for innovation in private as well as public sector in the UAE. Moreover, this paper invites future scholars to study the effect of other internal and external factors that can explain the remaining 76% of the variance in employees innovative behavior like organization structure, competitive forces, rules and regulations.

## REFERENCES

- Ahmed, K. (1998). Culture and climate for innovation. *European Journal of Innovation Management*, vol. 1 (1), pp. 30-43.
- Arad S., Hanson, M.A and Shneider R.J (1997).A framework of study of relationships between organizational characteristics and organizational innovation. *The journal of creative behavior*, vol. 31 (1), pp. 42-58.
- Amabile, T. M. (1988). A model of creativity and innovation in organizations. *Research in organizations*, vol. 10, pp. 123–167.
- Amabile, T.M., Conti, R., Coon, H., Lazenby, J. and Herron, M. (1996).Assessing the work environment for creativity. *Academy of Management Journal*, vol. 39 (5), pp. 54-84.
- Ashfaq Ahmed (2008) UAE employment: Expats make up 99% of private sector staff in UAE. *Gulf news*. Available at: <http://gulfnews.com/news/gulf/uae/employment/expats-make-up-99-of-private-sector-staff-in-uae-1.96744> Accessed [3-3-2015]
- Buckler, S.A. (1997).The spiritual nature of innovation. *Research-Technology Management*, March-April, pp. 43-7.
- Burnside, R.M. (1990). Improving corporate climates for creativity. *John Wiley and sons*, pp. 265-284.
- Byrne, J., (2008). *Process innovation key to survival in credit crunch - KTP*. [Online]. Available at: <http://www.foodproductiondaily.com/Safety-Regulation/Process-innovation-key-to-survival-in-credit-crunch-KTP> [accessed 21 February 2015].
- Cottam, A., Ensor, J. & Band, C., (2001).A benchmark study of strategic commitment to innovation. *European Journal of Innovation Management*, vol. 4 (2), pp.88 - 94.
- Denison, D.R. and Mishra, A.K. (1995).Toward a theory of organizational culture and effectiveness. *Organization Science*, vol. 6 (2), pp. 204-23.
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001).The job demands-resource model of burnout. *Journal of Applied Psychology*, vol. 86, pp. 499–512.
- Deppe, L., Kohn, S., Paoletti, F. & Levermann, A., (2002). *The holistic view of the front end of innovation*, pp.1-18. Available online at: <http://www.urenio.org/e-innovation/presentations/mantova/Deppe.pdf> [Accessed 1 -3- 2015].
- Deshpande, R., Farley, J.U. and Webster, F.E. (1993). Corporate culture, customer orientation and innovativeness in Japanese firms: a quadrad analysis. *Journal of Marketing*, vol. 57, pp. 23-7.
- Dickson, j. (1983).R& D work climate and innovation in semiconductors, *Academy of management journal*, Vol. 26 (2), pp.362-368. Available on line at <http://www.jstor.org/discover/10.2307/255984?sid=21105985514993&uid=2129&uid=4&uid=3737432&uid=2&uid=70> [Accessed 25-2-2015].
- Dombrowski, C., Kim, J.Y., Desouza, K.C., Braganza, A., Papagari, S., Baloh, P. and Jha, S. (2007). Elements of innovative cultures. *Knowledge and Process Management*, vol. 14 (3), pp. 190-202.
- Downs, G. W., Jr., & Mohr, L. B. (1976) Conceptual issues in the study of innovation. *Administrative Science Quarterly*, vol. 21, pp.700-714.

Dubai economic counsel (2014) *Sheikh Ahmad Bin Saeed receives 'DEC' and 'Philips' delegations*. Available at: <http://www.dec.org.ae/news/details.aspx?id=337> Accessed [3-3-2015]

Field, A. 2009. *Discovering statistics using SPSS*, London, SAGE.

Hunter, S.T., Bedell, K.E. and Mumford, M.D. (2007). Climate for Creativity: A Quantitative Review. *Creativity Research Journal*, vol. 19, pp. 69–90.

Ireland, R.D., Kuratko, D.F. & Morris, M.H., (2006). A health audit for corporate entrepreneurship: innovation at all levels: part I. *Journal of Business Strategy*, vol. 27 (1), pp.10 - 17.

Isaksen, S.G. and Ekvall, G. (2007). *Assessing the Context for Change: A Technical Manual for the SOQ – Enhancing Performance of Organizations, Leaders and Teams for over 50 Years*, 2nd edn. The Creative Problem Solving Group, Inc., Orchard Park, NY.

Johannessen, J.A., (1994). Information Technology and Innovation: Identifying Critical Innovation Factors. *Information Management & Computer Security*, vol. 2 (2), pp.4-9.

Jong, J. and Hartog D. (2007). How leaders influence employees' innovative behavior. *European Journal of Innovation Management*, vol. 10 (1).

JumanaKhamis (2014) UAE society: Dubai population 'unbalanced', stats show. Gulf news. Available at: <http://gulfnews.com/news/gulf/uae/society/dubai-population-unbalanced-stats-show-1.1380034>. Accessed [3-3-2015]

King, B., Chermont, K., West, M., Dawson, J. and Hebl, M. (2007). How innovation can alleviate negative consequences of demanding work contexts: The influence of climate for innovation on organizational outcomes. *Journal of Occupational and Organizational Psychology*, vol. 80, pp.631–645.

Kimberly, J. & Evanisko, M., (1981). Organizational Innovation: The Influence of Individual, Organizational, and Contextual Factors on Hospital Adoption of Technological and Administrative Innovations. *Academy of Management Journal*, vol. 24 (4), pp.689-713

Klein, K.J. & Sorra, J.S., (1996). The Challenge of Innovation Implementation. *Academy of Management Review*, vol. 21 (4), pp.55-80.

Laher, S 2010, 'Using exploratory factor analysis in personality research: best practice recommendations', *SAJIP: South African Journal Of Industrial Psychology*, vol. 36(1) , pp. 1-7.

Martins, E.C and Terblanche, F. (2003). Building organizational culture that stimulates creativity and innovation. *European journal of innovation management*, vol. 6 (1).

National.Audit.Office.of.UK, (2006). *Achieving Innovation in Central Government Organisations*. The Comptroller and Auditor General.

Prajogo, D.I. & Ahmed, P.K., (2006). Relationships between innovation stimulus, innovation capacity, and innovation performance. *R&D Management*, vol. 36 (5), pp.499-515.

Puccio, G.J., Treffinger, D.J. and Talbot, R.J. (1995). Exploratory Examination of Relationships between Creativity Styles and Creative Products. *Creativity Research Journal*, vol. 8, 157–72.

Saunders, M., Lewis, P. & Thornhill, A. 2012. *Research methods for business students*, New York, Pearson.

Suilman, A. (2001). Are we ready to innovate? Work climate-readiness to innovate relationship: the case of Jordan. *Creativity and Innovation Management*, vol. 10 (1), pp.49-59.

Suliman, A. and Al Harethi, B. (2013). *Transforming Government: People, Process and Policy*, vol. 7(3), pp.410-424.

Schneider, B., Gunnarson, S.K. and Niles-Jolly, K. (1996). Creating the climate and culture of success. *Organizational Dynamics*, pp. 17-29.

Shah, N. and GhulamSarwar Shah, S. (2010). Relationships between employee readiness for organisational change, supervisor and peer relations and demography. *Journal of Ent Info Management*, vol. 23(5), pp.640-652.

Sung, S. & Choi, J (2014), 'Do organizations spend wisely on employees? Effects of training and development investments on learning and innovation in organizations', *Journal Of Organizational Behavior*, vol. 35 (3), pp. 393-412

Tesluk, P.E, Faar, J..L and Klin, S.R (1997). Influences of organizational culture and climate on individual creativity. *The journal of creative behavior*, vol. 31 (1), pp. 21-41.

Tidd, J and Bessant, J. (2009). *Managing innovation*. Chichester [England]: John Wiley.

The International Organization for Knowledge Economy and Enterprise Development (IKED). (2010). *Towards Innovation Policy in Abu Dhabi: Indicators, Benchmarking, and Natural Resource Rich Economies*. [Online]. [Accessed 13 March 2011]. Available at: <http://gsec.abudhabi.ae/Sites/GSEC/Content/EN/PDF/innovation-report-pdf.property=pdf.pdf>.

Weiss, A., (1997). The communication of innovation in American policing. *Policing: An International Journal of Police Strategies & Management*, vol. 20 (2), pp. 292 - 310.

West, M. A., & Anderson, N. R. (1996). Innovation in top management teams. *Journal of Applied Psychology*, vol. 81, pp. 680–693.

Woodman, R.W., Sawyer, J.E. and Griffin, R.W. (1993). Toward a theory of organizational creativity. *Academy of Management Review*, vol. 18 (2), pp. 293-321.

Zhao, F., (2005). Exploring the synergy between entrepreneurship and innovation. *International Journal of Entrepreneurial Behaviour & Research*, vol. 11 (1), pp. 25 - 41.

## APPENDIX (research instrument)

### QUESTIONNAIRE

**Dear Sir/ Madam,**

This questionnaire gives you the opportunity to express your views on a wide range of issues related to the work conditions that can promote innovation at work place. Please note that there is no right or wrong answer.

The questionnaire will be used to collect the primary data needed for a research study. Therefore, we seek your assistance to be open, fair, and honest as much as possible in your responses.

The researchers assure you that no individuals will be identified from their responses and there are no requests for confidential information included in the questionnaire. The results of the analysis will be strictly used by the researchers for study purposes only.

Thank you

**Researcher**

**PART ONE: GENERAL INFORMATION**

Please tick one box for each question:

**A. Sex:**

- (1) Male ( )
- (2) Female ( )

**B. Marital Status:**

- (1) Married ( )
- (2) Unmarried ( )

**C. Education:**

- a. High school ( )
- b. Graduate degree ( )
- c. High Diploma ( )
- d. Masters or above ( )

**D. Age:**

- a. Less than 25 ( )
- b. 25 - 35 ( )
- c. 36 - 46 ( )
- d. 47 -above ( )

**E. No. of years worked in current organization:**

- a. One year or less ( )
- b. 2 - 7 ( )
- c. 8 - 13 ( )
- d. 14 - 19 ( )
- e. 20 years or above ( )

|   |     |
|---|-----|
| <b>F. No. of years worked in the position or job:</b> |     |
| a. One year or less                                   | ( ) |
| b. 2 - 7  | ( ) |
| c. 8 - 13   | ( ) |
| d. 14 - 19  | ( ) |
| e. 20 years or above                                  | ( ) |
| <b>G. Job Status:</b>                                 |     |
| a. First level  | ( ) |
| b. Middle level                                       | ( ) |
| c. Lower level  | ( ) |
| <b>H. Nationality:</b>                                |     |
| a. UAE National                                       | ( ) |
| b. Non UAE National                                   | ( ) |

**Part Two:**

This part is about your project climate which refers to the project and individual factors that constitute the human environment of your work. Please tick one box for each question which best describes your opinion.

| N O. | Question  | Strongly agree | Agree | Undecided | Disagree | Strongly disagree |
|------|---|----------------|-------|-----------|----------|-------------------|
| 1    | I have a variety of tasks at my work                        |                |       |           |          |                   |
| 2    | There are rare opportunities to use my skills and abilities |                |       |           |          |                   |
| 3    | There is a chance to do challenging work                    |                |       |           |          |                   |
| 4    | There is a friendly atmosphere among company employees      |                |       |           |          |                   |
| 5    | There is teamwork within the company                        |                |       |           |          |                   |
| 6    | Employees offer to help one another                         |                |       |           |          |                   |



|    |   |  |  |  |  |  |
|----|---|--|--|--|--|--|
| 7  | There is a conflict among the employees   |  |  |  |  |  |
| 8  | I try my utmost to get ahead  |  |  |  |  |  |
| 9  | I try to do my best for this company  |  |  |  |  |  |
| 10 | I am interested and deeply involved in my work  |  |  |  |  |  |
| 11 | I have a proper background and training to do my job  |  |  |  |  |  |
| 12 | I know how to do my job   |  |  |  |  |  |
| 13 | My boss give recognition for work well done   |  |  |  |  |  |
| 14 | My boss is flexible when needed   |  |  |  |  |  |
| 15 | I am not able to speak openly and honestly with my boss   |  |  |  |  |  |
| 16 | My boss takes a personal interest in employees  |  |  |  |  |  |
| 17 | There is rare a chance to take part in deciding what the work methods, activities, and goals are        |  |  |  |  |  |
| 18 | Employees suggestions are asked for when making decisions that will affect them                         |  |  |  |  |  |
| 19 | Important decisions are made by the employees closest to the action                                     |  |  |  |  |  |
| 20 | I take part in making the decisions that affect my job  |  |  |  |  |  |
| 21 | Pay increases are related to how well I do the job  |  |  |  |  |  |
| 22 | There is a chance for personal development  |  |  |  |  |  |
| 23 | I receive enough training to do my job  |  |  |  |  |  |
| 24 | promotions and rewards are given on the basis of "who you know" rather than on how well you do your job |  |  |  |  |  |
| 25 | I am rewarded on the basis of how   |  |  |  |  |  |

|    |  |  |  |  |  |  |
|----|--|--|--|--|--|--|
|    | well I do the work                               |  |  |  |  |  |
| 26 | I am rewarded on the basis of how much work I do |  |  |  |  |  |

**Part Three:**

*This part examines your readiness to create and/or innovate; please tick only one answer for each question.*

| NO. | Question   | Strongly agree | Agree | Undecided | Disagree | Strongly disagree |
|-----|--|----------------|-------|-----------|----------|-------------------|
| 1   | I keep myself informed about creative ways of doing work                           |                |       |           |          |                   |
| 2   | I prefer to stick to established rules and procedures when doing my job.           |                |       |           |          |                   |
| 3   | I come up with and try new ideas in my work  |                |       |           |          |                   |
| 4   | I try to question old ways of doing things in my work                              |                |       |           |          |                   |
| 5   | I search for fresh new ways of resolving problems in my work                       |                |       |           |          |                   |
| 6   | I try to update my knowledge in creativity and creative problem solving techniques |                |       |           |          |                   |
| 7   | I use past solutions to solve day-to-day problems                                  |                |       |           |          |                   |
| 8   | I try new solutions to emerging problems   |                |       |           |          |                   |