



Original Research Paper

Job satisfaction and knowledge sharing: The case of the UAE

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This research was aimed at investigating the influence of job satisfaction on knowledge sharing in an oil and gas sector. Furthermore, the relationships between various factors of job satisfaction and knowledge sharing were studied and examined. The study consisted of two core concepts: job satisfaction and knowledge sharing. Sampled population for the study was drawn from an oil and gas company located in the United Arab Emirates (UAE). A self-administered questionnaire was developed by combining two instruments. The study results revealed that employees' job satisfaction levels have a direct and positive relation with their knowledge sharing behaviours. The theoretical and managerial implications of the findings were discussed in the paper, together with some recommendations for managing satisfaction on knowledge sharing. The paper examined, for the first time in the UAE's oil and gas sector; the links between satisfaction and knowledge sharing.

Key words: Job satisfaction on knowledge sharing, knowledge donating, oil and gas sector, UAE, Middle East and knowledge management.

INTRODUCTION

Adoption of an effective knowledge management process presents a challenge to all organizations. Maintaining organization knowledge within the organization boundaries and making it available across the organization is a serious concern to organizations' managements in their effort to enhance performance and efficient resources. The human factor is very vital in the knowledge management system. The knowledge management system in any organization cannot succeed without the contribution and commitment of the employees within the organization. Therefore, understanding knowledge management systems and the importance of the role of human in its success is critical. Knowledge management process, and knowledge sharing in particular, is affected by the commitment, dedication and behaviour of employees. Knowledge sharing is defined by some scholars as a social act (Luthens, 2005). The way employees feel about their jobs is likely to have an impact on their behaviours. This study aims to investigate the nature, strength and significance of the relationships between employee job satisfaction and his/her knowledge sharing behaviour. The study examines

different factors of job satisfaction and knowledge sharing and the possible links between them.

The study is situated in one of Gulf Cooperation Countries (GCC); the United Arab Emirates (UAE). One of the most important sectors of the UAE economy is the oil and gas sector, which contribute to more than a quarter of UAE gross domestic product (www.uaeinteract.com). The leading company in this field in the UAE is Abu Dhabi National Oil Company (ADNOC) and its group of companies, which were selected as statistical population of this study. ADNOC and its group of companies are considered one of the biggest economy drivers in Abu Dhabi and the whole UAE. Revenue of the oil produced through ADNOC group is considered as the major income source for the country. Oil was commercially produced since the late sixties; most of the major oil fields in Abu Dhabi are more than 25 years old. Oil fields and reservoirs are moving toward the mature stage of their lives with all the associated complications. Certain experience and knowledge is required by the ADNOC group of companies to be able to face these Challenges and continuously innovate to maintain the

required production rates.

Literature Review

Knowledge is a vital and important resource, which provides organizations with a sustainable competitive advantage in our highly competitive economy (Noe and Wang, 2010). Successful distribution of the organizational knowledge resources would ensure that the required knowledge, at specific time, would be available to right people to take the right decision, and therefore enhance the quality of the decisions taken by an organization (Holsapple, 2001). According to Cardoso et al. (2008), the links between Knowledge managements and human related issues are not well understood. Avital and Hansen (2005), quoting von Krogh (2003), note that although knowledge sharing is deemed to have a central role in knowledge management, however, knowledge sharing behaviours research are yet to be sufficiently addressed. The organization's critical knowledge, held by its employees, is only available to the organization as long as the employees are willing to release and share it with the organization (Riege, 2005).

As a continuous process, people join an organization, work for the organization, and then at some point, leave the organization. Employees usually join the company with previous education and experience, and leave the company with more knowledge and experience that is related to the company's work, activities and culture. The more time an employee spends in an organization, the more this loss can be noticed. When old employees leave the workplace; valuable experience related to the organization, technical knowledge, and networks of professional contacts leave with them (Koc-menard, 2009). According to Lahaie (2005) knowledge loss or knowledge gap is most felt with the exit of knowledgeable, skilled and experienced workers. Organizations try to address the issue of maintaining critical knowledge within their boundaries through the implementation of Knowledge management systems and practices. A key factor to the success of knowledge management system is the human factor. IT systems can support and enhance knowledge management, but they cannot achieve knowledge management without the involvement and support of people.

Research has shown that job satisfaction has not been the subject of several studies. The relationship between job satisfaction and performance, turnover, and absenteeism were the main studied relationships. According to Murray (1999), researchers have attempted to correlate job satisfaction with performance, turnover and absenteeism. The relationship between job satisfaction and knowledge sharing behaviour has not been heavily discussed in the literature. Oshagbemi (2000) argues that the relationship between knowledge management and job satisfaction have not been clearly discussed in the management literature. Liao et al. (2004) examine employee relationship and

knowledge sharing in Taiwanese finance and securities firm. The results revealed that the relationship between employees on one hand, and that between superiors and subordinates play significant role in shaping their knowledge sharing practices and behaviours. The researchers concluded that "... the success of knowledge sharing in organizations, depend not only technological means, but is also related to behavioural factors" (p. 24). Bektas et al. (2008) examine the relationship between knowledge management and job satisfaction among employees of a five-star hotel in Turkey. The study concluded that there is no significant relationship between satisfaction and knowledge management. More recently, Michailova and Minbaeva (2012) studied organizational values and knowledge sharing in multinational corporations through a survey 219 managers and employees in 11 countries from four continents. Michailova and Minbaeva (2012) conclude that "... knowledge sharing behaviour is not influenced by organizational values *per se* but by the degree of their *internalization* by organizational members" (p. 59).

As far as the UAE and the Middle East are concerned, library search revealed that, to the best of this study's knowledge, satisfaction-knowledge sharing links have not been addressed; which is a gap that the current paper and future research will attempt to bridge.

Considering the findings of the discussed studies, the following hypotheses (Figure 1) can be developed for the current study.

H1: There is a relationship between job satisfaction and knowledge sharing.

H2: There is a relationship between job satisfaction and knowledge donating.

H3: There is a relationship between job satisfaction and knowledge collecting.

H4: There is a relationship between job itself and knowledge sharing.

H5: There is a relationship between supervisory style and knowledge sharing.

METHODS

The primary data was processed using the SPSS statistical data analysis software and Microsoft excels from 2011-2012.

Study sample

For the purpose of this study, data was collected from employees working within ADNOC group of six oil companies located within the emirate of Abu Dhabi in 2011. Using a self-administered questionnaire, the survey was carried out with 975 employees; meanwhile only 488 questionnaires were returned and valid for the analysis representing a response rate of about 50%. Out of the 488

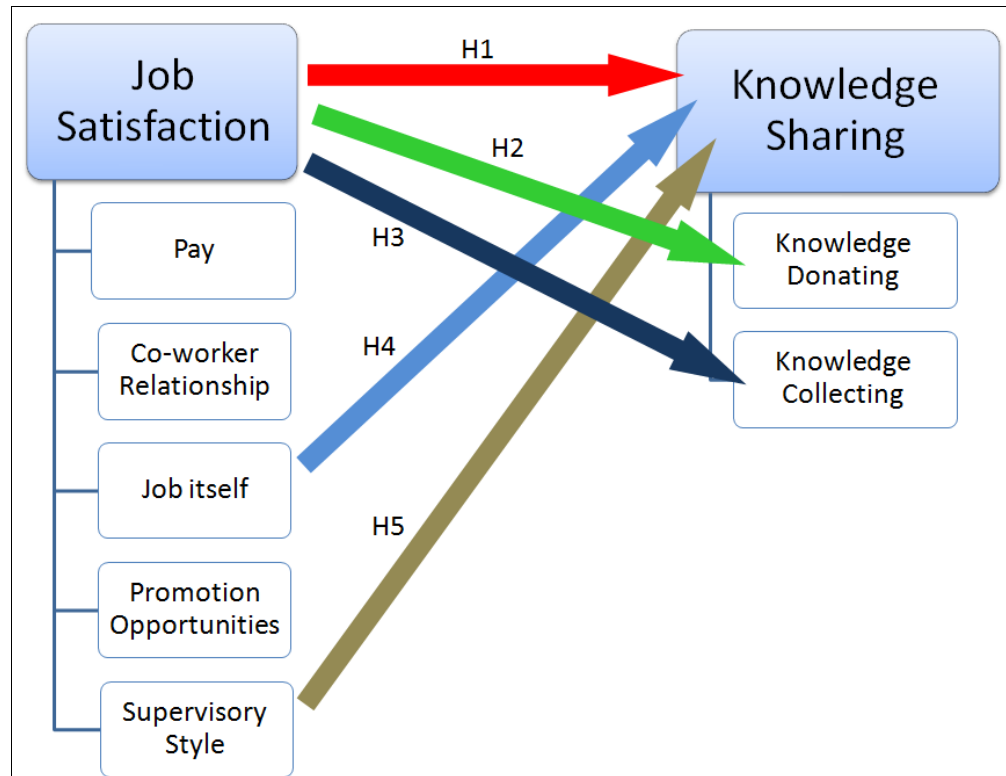


Figure 1: The hypotheses of the study

employees, 78.3% (382 respondents) were males and 21.7 (106 respondents) were females. Majority of the respondents were married (74.8%), unmarried employees represented 21.7% (106 respondents). The sample included 267 respondents from UAE (54.7 %), and 221 respondents (45.3) from other nationalities. Nonetheless, 40.5 % (198 survey) of the 488 surveys were answered in English, and 59.5% (290 surveys) were answered in Arabic. Table (1) presents the description of the sample study.

The study instrument and measures

For the purpose of this study, data were collected through a self-administered questionnaire. The questionnaire was made of three sections. The first section collected the general information about the respondents, the second and third sections collected the required information to evaluate the variables in the study. The Job satisfaction questions were adapted from the work of Suliman (2007), and the knowledge sharing questions were adapted from Hooff and Ridder (2004). The second section contained 21 items of the job satisfaction variable while the third section contained 13 items of knowledge sharing variable. The questionnaire used a scale of five points ranging from 1 (strongly disagree) to 5 (strongly agree). To bridge any possible gap in wordings, back translation process was adopted to check the accuracy of the Arabic version of the

questionnaire.

The reliability of the adopted scales was examined using Cronbach's alpha. Table (2) below summarises the outcome of this test.

As Table (2) exhibits, the reliabilities of scales ranged between .62 and .83, which means that adopted scales were all reliable.

Data analysis and results

This study investigated the relationship between job satisfaction and knowledge sharing. This section presents the data analysis and findings of the study. Table (3) shows the correlation results between the global variables and factors of job satisfaction and knowledge sharing.

Table (3) presents the correlation results between job satisfaction and knowledge sharing. The correlation table shows several significant correlations. In general the Pearson correlation values were not strong- varying from 0.001 to 0.29.

The study hypotheses were examined using both the correlation and regression tests. H1, relationship between job satisfaction and knowledge sharing behaviour was established. The correlation results, in Table 1, indicate a significant, yet not strong link between job satisfaction and knowledge sharing. The regression findings presented in Table (4) reveal that satisfaction of employees is a

Table 1.The description of the sample

Parameters	Gender	Marital Status	Education	Age	Experience in Org.	Experience in Job	Job level	Nationality
Male	382							
Female	106							
Married		365						
Unmarried		123						
High School			26					
College Degree			90					
Graduate Diploma			251					
Masters' or Above			69					
Less than 25 years				29				
Between 25-35 years				274				
Between 36-46 years				120				
Between 47-57 years				54				
58 years and above				11				
One year or less					109			
2-7 years					212			
8-13 years					105			
14-19 years					34			
20 years and above					28			
One year or less						127		
2-7 years						220		
8-13 years						74		
14-19 years						26		
20 years and above						41		
First level							69	
Middle level							323	
Lower level							96	
UAE National								267
Other Nationalities								221

significant predictor of their readiness to share knowledge, and 8% of the variance of knowledge sharing is explained by job satisfaction.

Similarly, H2- the relationship between job satisfaction and knowledge donating behaviour- was also established. The correlation results, in Table (3) indicate a significant link between job satisfaction and knowledge donating behaviours. The regression results (Table 4) exhibit that the F value of 19.52 is significant at 0.01 levels, the beta weight of job satisfaction is .20. Provided that the adjusted R square is .04; it can be concluded that satisfaction significantly predict knowledge donating behaviour and that it can explain 4% of the variance in this variable.

H3, job satisfaction and knowledge collecting behaviour, was also confirmed as both tests' findings show a statistically significant link between the two constructs (Tables 3 and 4). Job satisfaction significantly explained 7% of the variance in knowledge collecting behaviour.

H4, the relationship between satisfaction with the current job and knowledge sharing behaviour was also confirmed. The test results indicate a significant relationship. The adjusted R² value is 0.07 and the F value 36.3 (with sig= 000). These findings indicate that the job factor was able to explain 7 % of the variance in knowledge sharing

behaviours.

H5, the relationship between supervisory style and knowledge sharing behaviour was examined using both correlation and regression tests. The correlation results, in Table (1) indicate a significant correlation between supervisory style and knowledge sharing ($r = .19$). The regression findings (Table 2) show that supervisory style is a significant, yet a not strong predictor of knowledge sharing. And it can explain 4% of the variance in this variable. Given these findings it can concluded that hypothesis 3 was proved.

The results of this study are in line with the results of Liao et al., (2004); a study that found a link between satisfaction and knowledge sharing. On the contrary, this paper's results are not in line with Bektas, Koseoglu, and Soylu (2008) finding; which stated non-significant link between job satisfaction and knowledge sharing.

Conclusion and Recommendations

This study made an attempt to investigate the nature of the relationship between job satisfaction and knowledge sharing. The study focused on several hypotheses,

Table 2: the Inter-item consistency of study measures

No	Variable/Factor	Reliability
1	Knowledge Sharing	.78
2	Knowledge donating	.71
3	Knowledge collecting	.65
4	Job Satisfaction	.82
5	Pay	.62
6	Promotion	.71
7	Supervisory style	.83
8	Co-workers relationship	.70
9	Job itself	.81

Table 3: The Correlation test findings

		Pay Factor	Promotion Factor	Supervisory Factor	CoWorkers Factor	Job itself Factor	Global Job Satisfaction	Knowledge Donating Factor	Knowledge Collecting Factor	Global Knowledge Sharing
Pay Factor	Pearson Correlation	1								
	Sig. (2-tailed)									
Promotion Factor	Pearson Correlation	0.30**	1							
	Sig. (2-tailed)	0								
Supervisory Factor	Pearson Correlation	-0.12**	-0.04	1						
	Sig. (2-tailed)	0.007	0.416							
Co-workers Factor	Pearson Correlation	0.26**	0.28**	-0.31**	1					
	Sig. (2-tailed)	0	0	0						
Job itself Factor	Pearson Correlation	0.07	0.09*	0.15**	0.14**	1				
	Sig. (2-tailed)	0.115	0.039	0.001	0.002					
Global Job Sat	Pearson Correlation	-0.19**	0.44**	0.44**	0.08	0.55**	1			
	Sig. (2-tailed)	0	0	0	0.074	0				
Knowledge Donating Factor	Pearson Correlation	0.02	0.01	0.16**	0.04	0.16**	0.20**	1		
	Sig. (2-tailed)	0.683	0.836	0	0.444	0	0			
Knowledge Collecting Factor	Pearson Correlation	-0.02	0.13**	0.16**	0.18**	0.27**	0.28**	0.34**	1	
	Sig. (2-tailed)	0.681	0.006	0	0	0	0	0		
Global Knowledge Sharing	Pearson Correlation	-0.001	0.09	0.19**	0.14**	0.27**	0.29**	0.80**	0.84**	1
	Sig. (2-tailed)	0.977	0.059	0	0.003	0	0	0	0	

** Correlation is significant at the 0.001 level (2-tailed).

* Correlation is significant at the 0.005 level (2-tailed).

Table 4: Regression test results for climate factors and performance components

No	Regression Equations	F value & Sig. level	R Square	Adjusted R Square	Beta
1	Job Satisfaction and Knowledge Sharing global variables.	44.45 (0.000)	0.08	0.08	.29
2	Job itself and Knowledge Sharing between supervisory	36.30 (0.000)	0.07	0.07	.26
3	style factor and Knowledge sharing	19.06 (0.000)	0.04	0.04	.19
4	Job Satisfaction and Knowledge donating	19.52 (0.000)	0.04	0.04	.20
5	Job Satisfaction and Knowledge collecting	39.25 (0.000)	0.08	0.07	.27

reflecting the relationship between job satisfaction and knowledge sharing and their factors. As illustrated in the methodology and data analysis sections, the study was able to prove the existence of positive and significant, yet not strong relationships between knowledge sharing and job satisfaction and their factors. The study proved the following hypotheses:

1. There is a positive relationship between job satisfaction and knowledge sharing.
2. There is a positive relationship between job itself and knowledge sharing.
3. There is a positive relationship between supervisory style and knowledge sharing.
4. There is a positive relationship between job satisfaction and knowledge collection.
5. There is a positive relationship between job satisfaction and knowledge donating.

Generally, the correlation values obtained were low yet significant. Data analysis was able to provide a figure of how behaviour was explained by job satisfaction. The results of the study have indicated an important and significant positive effect of the employees prospective; of how issues related to their job satisfaction and knowledge sharing would have the largest effect on the employees' willingness to contribute to knowledge sharing.

Data analysis puts into focus a few interesting observations regarding job satisfaction and knowledge sharing. Job satisfaction has a positive influence on employees' knowledge sharing behaviour. Job itself and the supervisory style were the factors of job satisfaction which had the largest influence on the knowledge sharing behaviour of employees. Although, pay was expected to have a bigger impact on employees' behaviour, the impact was minimal on the knowledge sharing behaviours within the ADNOC group of companies in Abu Dhabi.

It is worth mentioning that conducting a survey with employees of the oil companies is not very common,

because people tend to be reluctant to freely express their feelings and opinions. In addition to providing support to others, knowledge sharing within the gulf area and Arab region in general, is considered high moral and socially honourable. Very few people are expected not to share information with others; people tend to give political or socially accepted answers. In the case of the distributed questionnaires, it was observed that some questions were answered with "undecided" or "socially positive acceptable answer".

This study has proved the influence of job satisfaction on knowledge sharing behaviour of employees of the ADNOC group of oil companies within Abu Dhabi. And as a consequence of the increase in oil demand internationally and gas demand locally, companies of the oil sector in Abu Dhabi have been forced to increase its operations and expand its organizations, and at the same time maintain knowledge resources. To maintain standard, especially while expanding, it is critical to maintain knowledge management; particularly knowledge sharing. Although some of the companies within the ADNOC groups is less than 10 years old, the oil fields and critical facilities within the groups have a range age of 25 years, which adds additional emphasis on the significance to leverage experience and knowledge between different parts of the organization. Taking into consideration the study findings, several recommendations can be presented.

Knowledge sharing and job satisfaction are very important and should be addressed by managers. Many researchers now agree that knowledge management is a process which requires employees' commitment and dedication to maintain, create and diffuse knowledge within the organization (Gupta, 2008). The commitment of managers and top management specially, is essential to support job satisfaction and knowledge sharing efforts and initiatives. Employees would generally give extra attention to what they think is important and valued by their

managers. Directly or indirectly, managers will take part in supporting knowledge sharing and job satisfaction within their organizations.

Knowledge transfer is a social activity which takes place within an organization (Lucas and Ogilvie, 2006). Knowledge sharing is influenced by the employees' beliefs or perceptions of issues around them. The success of knowledge sharing in business is strongly related to behavioural factors (Cheng, et al., 2004). An employee job satisfaction is subject to employees' beliefs, perceptions and expectations. Managers within the organization have to take the responsibility to observe how their employees evaluate their jobs and find ways which might improve their job satisfaction levels (Suliman, 2007). And while doing that, managers should remember that how employee see or perceive their jobs, organization supervisory style, co-workers, promotion chances within the organization and pay, is expected to influence their job outcomes (Suliman, 2007).

Managers shall eliminate or minimize all sources of dissatisfaction for their employees. Job satisfaction has proven to have an effect on employees' job performance, commitments, and loyalty to their companies. The more satisfied the employees, the more likely they are to be high performers (Suliman, 2007). Satisfaction creates confidence, loyalty and ultimately improves quality in the output of the employed (Myers and Tietjen, 1998). In the same vein, the absence of satisfaction at work might have a negative effect on the employees' physical and mental conditions. According to Judge and Saari (2004), taking continuous steps to tackle the employees low job satisfaction is not only important to organizations, but it is also important to prevent employees low job satisfaction from spilling over to their personal lives.

The job itself is the term used to "describe the variety of tasks involved, the interest and challenge the job generates, and the clarity of the job description/requirements" (Hayat, et al., 2010). Couger (1988) while investigating the motivating factor for system analysts and programmers concludes that job itself was the main motivating factor (Chen, 2008). Organization and managers can attempt to increase the employees' job satisfaction in relation to the job itself, through adoption of techniques such as job enrichment and job enlargement, and where possible, job rotation. No specific method or technique can be used with all jobs; the design of the job enhancement should consider the work environment and job requirements.

Supervisory style (which refers to process of leadership, motivation factors, communication, process of decision making, and characteristics of the control process) is important for knowledge sharing process. It was found that democratic or participatory management style results in good team spirit and job satisfaction among staff (Newstrom and Davis, 1992) and therefore improves knowledge sharing activities. Managers can increase their employees' job satisfaction in relation to supervisory style,

by creating a participatory work environment in the organization. Furthermore, organization leaders could consider increasing staff's job satisfaction by establishing a two-way top-down and bottom-up flow communication in order to make the employees feel that their leaders are close to the employees and they appreciate their work and concerns (Esfahani, et al., 2008).

Oil companies in Abu Dhabi are multi-national companies. Although the official language of communication is English, people skills and levels of knowledge/understanding of the language vary greatly. Managers are encouraged to ensure the availability of the appropriate people within the knowledge transfer cycle. Sufficient level of English language understanding should be considered for knowledge owner and knowledge receiver. Sometimes, this is difficult, especially, if the knowledge owner is old and believes that his language skills is adequate where it is not. Bearing in mind that knowledge itself is not bonded to certain language, assigning 'knowledge receiver', with similar mother language skills will be very efficient to overcome this problem.

In addition, Cultural differences play a role in the effectiveness of knowledge sharing between employees. According to Slagter (2007), cultural differences among nations would influence the implementation of knowledge managements systems. Establishment of a multicultural work environment with an awareness of the differences in cultures should be promoted; in order to build for tolerance, which is important for the success of knowledge sharing.

Several studies have highlighted that employee job satisfaction and needs vary with age (Ayeni, et al., 2007). In order for managers to ensure effective contribution to knowledge sharing from their employees, they should consider these changes and differences while motivating their employees to participate in knowledge sharing activities. Managers should bear this differences and changes in mind in order to be able to utilize their employees as effective and efficient as possible. Keeping employees satisfied with their jobs over years is critical to organization's success (Suliman, 2007). As people grow older they find it essential to attain a certain balance between their job and private life (Slagter, 2007).

The implementation of an incentive is needed to achieve the desired level of knowledge sharing within organizations. Some employees are hesitant in their knowledge sharing, because there are no visible rewards for sharing knowledge (Goh, 2002). Compensation, reward systems and performance appraisal can be used by managements to implement and enhance knowledge sharing within the organizations (Goh and Yahya, 2002). The most effective method to promote knowledge sharing would be to link it with reward and performance appraisal (Jain, et al., 2009). Therefore, Knowledge sharing activities can be added to the performance appraisal of employees to

assure that the knowledge sharing is taken seriously by employees, and at the same time, monitor the process of knowledge sharing by identifying employees contributing to knowledge management systems and employees who are not. The appraisal can also be accompanied with a reward system. The employees or knowledge owners who demonstrate an active behaviour or effectiveness in sharing critical knowledge which they posse with other employees can be recognized and rewarded. In addition, monetary incentives can be used to start knowledge management systems and then given to users from time to time (Jain, et al., 2009). In the long run, employees should be prepared by organizations and mangers to consider knowledge sharing as one of the basic requirements of daily business and culture. Knowledge sharing should not only be integrated into job descriptions, but it should also be integrated into the value system and culture of organizations (Jain, et al., 2009).

Employees' retirement is one of the ways where organization knowledge is lost. The implementation of some proactive measures can reduce the negative impact of employees' retirements. Planning and mentoring are assert by Fabian et al., (2007) as some of the measures to reduce the impact of experience staff leaving the organization. Some additional strategies are also defined by Lahaie (2005) as methods which can be utilized to minimize the loss of corporate knowledge. Lahaie (2005) suggests the use of pre-retirement planning, casual employment (additional contract period), networking, term/specified period employment, and succession planning.

As highlighted in the literature review, some employees are not keen to share the knowledge they have because they are not sure of their management intention. Critical information is seen as source of power and employees are usually reluctant to share it (Goh, 2002). Therefore, developing a culture of trust is required for the success of knowledge sharing and knowledge management systems. Building trust within the organization culture will increase the tendency of employees and teams to share important knowledge and information (Goh, 2002).

It is also worth mentioning that knowledge transfer is a process that takes time. Several methods can be used to speed it up, but availability of adequate time remains essential to its success. Knowledge sharing might have an effect on other activities handled by employee, to promote knowledge sharing, therefore, adequate time should be assigned for the activity. Adequate time for employees to socialize and exchange information is essential.

The relationship between the knowledge giver or owner and the knowledge receiver is important and should be given appropriate attention by organizations (Goh, 2002). Employees are more likely to share knowledge and exchange information with "reputable colleagues" (Lucas and Ogilvie, 2006) .The nature of the relationship between the knowledge recipient and knowledge owner can be a barrier to effective knowledge transfer (Goh, 2002).

Therefore, managers shall consider this factor when designing knowledge sharing system or assigning a "knowledge receiver" to "knowledge owner".

Research limitation

This research examined the relationships between job satisfaction and knowledge sharing with some limitations. Bias in self-reporting or political correctness might have had an influence on responses. Job Satisfaction and Knowledge Sharing are related to human behaviours. Another limitation to the research was the time used for distribution of the questionnaire. The questionnaire was distributed in the first quarter of the year 2011, when majority of oil employees were on leave. This fact might explain the low return ratio of the questionnaires. The research focused on employees within ADNOC group of oil companies. The results may not reflect the realities of other oil companies and other economic sectors (e.g. service and trade) in the UAE.

Scope for further research

The study findings and conclusions suggest that further investigations of the nature of the relationship between job satisfaction and knowledge sharing within different organizations within Abu Dhabi, UAE, and the Arab region would be needed; before generalizing conclusions about the nature of the relationship between job satisfaction and knowledge sharing. Government sectors, oil sectors in the other emirates, construction sector or the other industries within the region might be subject of future research. Scholars may also investigate the possibility of other variables affecting both employees' job satisfaction and their knowledge sharing behaviour such as work climate or organization culture.

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