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KNOWLEGE SHARING INITIATIVE AMONG PUBLIC OFFICERS IN MALAYSIA: THE RELATIONSHIP BETWEEN ORGANIZATIONAL FACTORS AND THE QUALITY OF KNOWLEDGE SHARING

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Abstract: Knowledge sharing is one of the important dimensions in knowledge management. Previous studies capture many factors which influence knowledge sharing behaviour in organization be it from individual, organizational or technological perspective. Most studies emphasised on knowledge sharing practise rather than the quality of the endeavour. This study seeks to investigate the relationship between organizational factors (i.e. organizational culture, organizational structure, rewards and recognitions, office layout) and knowledge sharing quality in Malaysian public sector. A survey on 428 government officers in three selected government agencies was conducted employing questionnaires as the instrument for collecting data. The data was analysed using SPSS version 16.0. Factor analysis and reliability test were conducted to ensure the validity and reliability of the instrument. Confirmatory factor analysis was carried out to verify the existence of four dimensions of organizational factors. The results from correlation analysis indicate positive and significant correlation between organizational factors and knowledge sharing quality. However, multiple regression analysis shows significant relationship only exists for organizational culture. This indicates that knowledge sharing quality among Malaysian government officers is influenced by the culture of their organization.

Keywords: Organizational Factors, Knowledge Sharing, Public Sector

INTRODUCTION

Knowledge management is an emerging discipline with many issues yet to be explored ranging from conceptual, process, technological, organizational, management and implementation perspectives. Knowledge-based theory of the firm (KBT) postulates that knowledge is a strategic significant resource of a firm to gain competitive advantage and increase firm performance (Grant, 1996). The heterogonous knowledge capabilities of a firm can be integrated and coordinated to gain competitive advantage. The main dimension of competitive advantage of a firm is the ability to create and transfer knowledge effectively in organizations (Kogut & Zander, 1992), thence, knowledge sharing is one way to disseminate knowledge.

Knowledge management model is a prerequisite to improving Malaysian public sector service delivery (Razak, 2006). Literature in knowledge management area shows studies on knowledge sharing in public sector (McAdam & Reid, 2000; Syed Omar & Rowland, 2004) with particular reference to Malaysia are at scarce. These past studies limit the focus on antecedents of knowledge sharing behaviour (Mohd Bakhari & Zawiyah, 2008; Syed Omar & Rowland, 2004), ignoring the quality of knowledge shared by employees. Although programmes were organized to increase the employees' knowledge but it is of question whether the knowledge shared is of quality. It is evident that quality knowledge sharing contributes to the improvement of public sector service delivery (Mohd Bakhari, Zawiyah & Syed Omar, 2008)

The importance of knowledge to organization is undeniable but knowledge is only valuable if it is shared (Small & Sage, 2005). On the other hand, it is a challenge foster knowledge sharing among employees as the practice is an unnatural act. Thus, it is important to identify the antecedents or factors that influence knowledge sharing quality in public organizations particularly from organizational perspective. Based on these grounds, this study is undertaken to address the following research questions:

- i. Is there a relationship between organizational culture and knowledge sharing quality?
- ii. Is there relationship between organizational structure and knowledge sharing quality?
- iii. Is there relationship between reward and recognition and knowledge sharing quality?
- iv. Is there relationship between office layout and knowledge sharing quality?

KNOWLEDGE MANAGEMENT AND KNOWLEDGE SHARING

Knowledge management is a process of identifying, organizing and managing knowledge resources (Al-Hawamdeh, 2003) and a process where organizations create, generate, capture and use knowledge to support and improve organizational performance (Kinney, 1998). There are five important dimensions in knowledge management activities. These are knowledge capture, knowledge creation, knowledge use, knowledge sharing and knowledge retention which interrelate to each other.

This study focuses on knowledge sharing in public organizations in Malaysia. Knowledge sharing is defined as a deliberate act that makes knowledge reusable by other people through knowledge transfer (Lee & Al-Hawamdeh, 2002). It is a process which takes place between individual (Ryu et al., 2003) whereby yhe exchanged knowledge (tacit or explicit) will eventually create new knowledge (Van den Hoof et al., 2003). Thus, from a broader perspective, knowledge sharing refers to 'the communication of all types of knowledge' including explicit knowledge (information, 'know-how' and 'know-who') and tacit knowledge (skills and competency) (Al-Hawamdeh, 2003).

To be materialised, knowledge sharing has to take place in organization (Van den Brink, 2003). The shared Knowledge than becomes organizational knowledge. Syed Omar and Rowland (2004) suggest that public or private sector need to manage knowledge both tacit and explicit, to ensure organization can take full advantage of the knowledge. Organizational knowledge is best described by four modes of knowledge exchange (Nonaka & Takeuchi, 1995; Sveiby, 1997) which are: socialization, externalization, internalization and combination. Van den Brink (2003) explains the knowledge sharing process that happen in those four modes as shown in Table 1.

Table 1: Knowledge Sharing Process adapted from Van den Brink (2003) and Nonaka & Takeuchi (1995)

	Process	Knowledge sharing			
1.	Tacit to tacit (Socialization)	Knowledge is shared during social interaction such as story telling that enable transfer of complex tacit knowledge from an individual to another.			
2.	Tacit to explicit (Externalization)	Knowledge sharing happens when an individual try to communicate his/her tacit knowledge with others through, for example, writing ideas and thoughts in the form of theory.			
3.	Explicit to explicit (Combination)	When knowledge is written in the form of documents, it is shared with other people. If the combine their knowledge, it will create new ideas that written on papers.			

4.	Explicit to tacit	Human can get knowledge when rational
	(Internalization)	behind a document is informed by other
		individuals.

Knowledge sharing occurs when an individual is interested in helping others to develop a new capability for action (Senge, 1990). However, the issue is whether the shared knowledge is of quality. The initiative is meaningless unless quality knowledge is shared. As most studies had focused on knowledge sharing behaviour rather than knowledge sharing quality, it therefore crucial for investigating the quality of knowledge sharing since quality knowledge is central for a matured community (Chiu et al., 2006). Although it is difficult to define quality knowledge sharing (Larsson & Ohlin, 2002), Chiu, Hsu & Wang (2006) have developed a measurement technique for knowledge quality. They measured quality knowledge in terms of relevancy, easy to understand, accuracy, completeness, reliability and timeliness. The items were derived from McKinney et al. (2002) web-information quality and De Lone and McLean (2003) concept of information quality.

Organizational Factors and Knowledge Sharing

There are many factors influencing knowledge sharing behaviour. People do hinder knowledge sharing due to many barriers (Riege, 2003), thirteen of which are categorised as organizational barriers:

- i. Unclear integration between knowledge management strategy and knowledge sharing initiative in organizational perspective.
- ii. Lack of leadership and management direction in the form of disseminate benefit and value of knowledge sharing practise.
- iii. Lack of formal and informal space to share knowledge.
- iv. Lack of rewards and recognition.
- v. Lack of corporate culture support.
- vi. Knowledge retention by the expert workers is not given priority.
- vii. Lack of infrastructure to support knowledge sharing.
- viii. Lack of firm resources that facilitate knowledge sharing practise, external competition with business unit and between subsidiaries.
- ix. Communication and knowledge flow limited to specific direction such as top to down.
- x. Physical situation and office layout.
- xi. Internal competition.
- xii. Hierarchal organizational structure.
- xiii. Size of business unit too big to create interaction.

In addition, Lee and Al-Hawamdeh (2002) identify a few organizational factors that influence knowledge sharing practise such as trust, organizational culture, reward & incentives, sharing champions, office layout, work design, staff tenure, management support and organizational structure. However, both Reige (2005) and Lee & Al-Hawamdeh (2002) did empirically test these factors. Syed Omar & Rowland (2004) too, investigate a few organizational factors that seem to affect knowledge sharing transfer performance such as sharing culture, individualism, document confidentiality status and communication flow.

Although the literatures show many organizational factors influence the knowledge sharing practise, but only four organizational factors were selected for investigation by this study. The selection of those factors is partly based on McKinsey 7s framework, previous literatures and its relevancy to public sector. These factors are organizational culture (Long, 1997; Lee & Al-Hawamdeh, 2002; Sharrat & Usoro, 2003; Kim & Lee, 2005; Syed Omar & Rowland, 2004); organizational structure (Lee & Al-Hawamdeh, 2002; Sharrat & Usoro, 2003; Kim & Lee, 2005; Syed Omar & Rowland, 2004; rewards and recognitions (Lee & Al-Hawamdeh, 2002; Bock et al., 2005; Kim & Lee, 2005; Lin, 2007); and office layout (Davenport & Prusak, 1998; Lee & Al-Hawamdeh, 2002).

a) Organizational Culture

One of the biggest challenges in knowledge sharing is organizational culture (Skyrme, 1997). Some employees are reluctant to share knowledge because of intensely competitive culture that could lead to back-stabbing and aggressive environment (Orlikowsky, 1992). Organizational culture means beliefs or values that are shared (Van den Brink, 2003). Long (1997) explains organizational culture in terms of values, norms and practises in the organization. In this study, organizational culture is defined as an instance of practices, values and norms that promote knowledge sharing culture among employees in the organization. Following this, a hypothesis is proposed:

H1: There is a significant relationship between organizational culture and knowledge sharing quality

b) Organizational Structure

Organizational structure means how people and task in an organization is arranged to ensure the work done. Traditionally, public sector organizational structures are compartmentalized and this complicates the information and knowledge sharing between units and different levels in organizations (Cong & Pandya, 2003). In this study, organizational structure is defined as the number of levels of authority in the

organization (Buchanan & Huczynski, 1997; Sharratt & Usoro, 2003) Thus, the following hypothesis is proposed:

H2: Organizational structure has a significant relationship with knowledge sharing quality

c) Reward and Recognition

Rewards can be in terms of monetary incentives and non monetary incentives (Bartol & Srivastava, 2002). To encourage and create a consistent knowledge sharing, monetary values such as financial rewards, salary increment and the like should be used (Davenport & Prusak, 1998). In this study, reward and recognition is defined as an instance of incentives given by organizations to the employees who share knowledge whether monetary rewards or non monetary rewards (recognition) (Bartol & Srivastava, 2002, Bock et al. 2005; Al-Hawamdeh, 2003). The under mentioned hypothesis is then proposed:

H3: Reward and recognition have a significant relationship with knowledge sharing quality

d) Office Layout

Davenport & Prusak (2000) suggest that corporate planner, architects, academics and executives should give consideration and creative thought to the issue of office design which hinder corporate world citizens from working with knowledge. It has becoming more important for them to design offices that can encourage socialization between employees to transfer knowledge (Arora, 2002). Lee & Al-Hawamdeh (2002) question suggested that office layout encourages social interaction among employees. Allen (1977) concluded that the communication of any two people drops dramatically when the distance between desks increase. In this study, office layout is defined as a physically opened or closed design office can influence knowledge sharing in organization (Lee & Al-Hawamdeh 2002). Thus, the following hypothesis is proposed:

H4: Office layout has a significant relationship with knowledge sharing quality.

THEORETICAL FRAMEWORK

The framework outlined in this study is adapted from Lee & Al-Hawamdeh (2002), Syed Omar and Rowland (2004) and Chiu et al. (2006) to investigate the relationship between organizational factors and knowledge sharing quality. It is central to study organizational factors since knowledge sharing takes place in organization (Van den Brink, 2003). This study also focuses on the quality of knowledge shared because knowledge sharing can take place at anytime and anywhere. Knowledge sharing is

meaningless if the knowledge shared is of low quality, which in turn does not assist in improving both individual and organizational performance. In contrast, knowledge sharing is acknowledged as the means for continuous performance improvements and increase customer and employee satisfaction in non-profit making organizations (Pan & Scarbrough, 1998; Senge 1997; Rumizen, 1998). The theoretical framework of the study is presented in Figure 1 below.

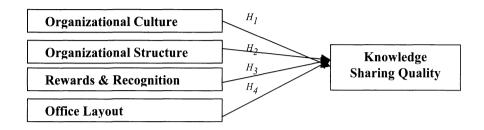


Figure 1: Theoretical Framework of Relationship between Organizational Factors and Knowledge Sharing Quality

METHODOLOGY

Population and Sample

The size of population under study is around 1200 that consists of officers from Management and Professional Group (MPG) from three selected central agencies in Putrajaya. The officers are middle managers positioned between top management (Premier Group) and support staff (Support Group). As for the unit of analysis, officers from MPG were chosen since they are directly involved in formulating policies for public sector human resource management, financial management and socio-economic development of the country. The middle manager were selected as knowledge are aspired and created by this level of managers who are leaders of a working group or task force that mediate the exchange process between top management and support staff Nonaka and Takeuchi, 1995). Moreover, knowledge is systematically generated at this level (McAdam). Policy making and business development are trusted by the government agencies knowledge-based activities (Husted et al., 2005). Stratified random sampling was used in this study and the selection of sample size is based on formula by Kerjie & Morgan (1970 in Sekaran 2005). Questionnaires were sent to 734 officers. 450 were returned (61.25%) and 428 were usable.

Measurement

The instruments for organizational factors were partially adapted from previous study (Syed Omar & Rowland, 2004). Some of the items were developed by the researcher based on previous literatures (Lee & Al-Hawamdeh, 2002; Davenport & Prusak, 1998). For knowledge sharing quality, the instruments were adapted from Chiu et al. (2006), McKinney et al. (2002) and DeLone & McLean (2003). The instruments were modified to suit the public sector context. Organizational factors consist of four constructs: organizational culture, organizational structure, rewards & recognition and office layout. There are four items in organizational culture construct, three items in organizational structure construct, three items in rewards & recognition construct and three items in office layout construct. Six items were used to evaluate the response towards knowledge sharing quality. The respondent were asked whether they agree to the statements related to 13 items of knowledge sharing quality and six items of knowledge sharing quality using Likert scales with 1=strongly disagree and 5=strongly agree.

FINDINGS AND DISCUSSION

Demographic profile of the respondents

The respondents' demographic characteristics are presented in the Table 2 below.

Table 2: Respondents' Demographic Characteristics (n=428)

Demograpl	nic Characteristics and	Frequency	Percentage
C	lassification		
Gender	Male /Female	195	45.6
		233	54.4
Age	<26 years old	86	20.1
	26 to <30 years old	125	29.2
	30 to <35 years old	96	22.4
	35 to <40 years old	38	8.9
	40 to <45 years old	28	6.5
	45 to <50 years old	24	5.6
	≥ 50 years old	31	7.2
Level of	PhD	2	0.5
Education	Masters	106	24.8
	First Degree	317	74.1
	Others	3	0.7
Position Grade	54	26	6.1

	52	43	10.0
	48	74	17.3
	44	53	12.4
	41	232	54.2
Years of	<1	90	21.0
service in	1-5	169	39.5
public	6-10	55	12.9
sector	11-15	48	11.2
	16-20	17	4.0
	>20	49	11.4

There were 195 (45.6%) male and 233 (54.4%) female respondents which indicate the ratio of male and female is almost balance in this study. Most of the respondents' age (71.7%) ranged between 26 to 40 years old and 66.6% are junior managers (grade 41 to 44). Almost all of the respondents have a first degree and 73.4% have less than 10 years work experience in public sector.

Profile of Organizational Factors and Knowledge Sharing Quality

Table 3 shows the descriptive analysis for organizational factors. The results indicate that organizational culture (mean=4.12, S.D=.499) is the most influential factors that affect knowledge sharing quality among government officers followed by office layout (mean=3.64, S.D=.768) and organizational structure (mean=3.26, S.D=.741). However, most respondents disagree that knowledge sharing quality is influenced by reward and recognition (mean=2.46, S.D=.964).

Table 3: Descriptive Profile of Organizational Factors

	Mean	Standard Deviation
Organizational Culture	4.12	.499
Organizational Structure	3.26	.741
Reward & Recognition	2.46	.964
Office Layout	3.64	.768

As exhibited in Table 4, the mean of distribution of knowledge sharing quality profile were more than 3.5. The relevant knowledge sharing had the highest mean with a statistical value of 4.11 and standard deviation = 0.462 followed by easy to understand dimension (mean 4.06, SD=0.418) and reliability (mean 3.95, SD=0.469). Based on the item mean scores shown in Table 4, respondents have reported relevancy as being the most important in their knowledge sharing quality followed by easy to understand and timeliness knowledge sharing quality construct.

Table 4: Descriptive profile of Knowledge Sharing Quality

	Mean	Standard Deviation
Relevancy	4.11	.462
Easy to understand	4.06	.418
Accuraty	3.85	.564
Completeness	3.67	.639
Reliablity	3.95	.469
Timeliness	3.96	.452

Goodness of Measure

In order to test the goodness of measure used in the study, validity and reliability test were conducted by submitting the data for factor analysis and obtaining Cronbach alpha. Factor analysis was conducted as a data reduction technique and to determine whether items are tapping into the same construct. During factor analysis, factors with eigen value of more than one would be retained for further analysis (Hair et al. 2006). Reliability test was applied to ensure consistency in measurement across time and across various items in the instrument (Sekaran, 2005).

a) Organizational factors

The Principal Component Factor Analysis (PCA) was performed for all the 13 items of organizational factors. The KMO value is 0.719 which exceeds the recommended value of 0.6 (Pallant 2001) and the Bartlett's Test of Sphericity is significant as shown in Table 5. The results (KMO and Bartlett's) suggest that the sampled data is appropriate to proceed with a factor analysis procedure. Table 6 presents the result of varimax factor rotation of all variables for organizational factors. The PCA extracted four distinct components with eigen values exceeding 1.0. Three items from reward & recognition loaded on Factor 1 with a variance of 19.41 percent, four items from organizational factor loaded on Factor 2 with a variance of 19.14 percent, three items from organizational factors loaded on Factor 3 with a variance of 18.26 percent and three items loaded on Factor 4 with a variance of 14.45 percent. The total variance achieved is 71.25 percent. The results are presented in Table 5 and 6 below.

Table 5: KMO and Bartlett's Test for Organizational Factors Instrument

Kaiser-Meyer-Olkin of S	0.719	
	Approx. Chi Square	2499.202
Bartlett's Test of Sphericity	Df	78
	Significance	0.000

Table 6: Factor Analysis and Reliability Test Result on Organizational Factors

Items		
	2	4
G2. I am willing to share knowledge if I get promoted.		
G1. I am willing to share knowledge if I am financially rewarded.		
G3. I will get higher marks in annual performance appraisal if I share knowledge.		
E1. The culture in my organization encourages and provides opportunity for the communication of ideas, knowledge and experiences among all employees.	.802	
E3. Within my organization knowledge is disseminated to a wide range of people irrespective of positions/grades.	.800	
E2. Officers are ready and willing to give advice and help upon request.	.795	
E4. In my organization interdisciplinary cross-functional teamwork is extremely important for decision making and problem solving.	.646	
F2. The nature of current organizational structure restricts communication flow between divisions/units. (R)	.856	
F3. My organization is very bureaucratic that makes it difficult to share knowledge. (R)		
F1. The confidentiality status of document leads to problems in acquiring information and creating knowledge. (R)		
H2. My office is physically opened facilitate me to share knowledge with my subordinate.		.927
H1.Physically opened office facilitate me to share knowledge with my colleagues.		.852
H3. My superior's office is physically opened facilitate me to share knowledge with him/her.	•	.852

Cronbach Alpha	.698	.866
Eigenvalues	2.697	1.589
Percentage of common variance	19.136	14.446
Cumulative percentage	38.548	71.249

^{*} cut off point used is 0.35 since the sample size is more than 350 (Hair et al. 2006). All loadings less than 0.35 are not shown

Table 6 above presents the results of varimax factor rotation of all variables for organizational factors. All the 13 items loaded on four factors. Four items loaded in Factor 1 with a variance of 19.412 percent, three items loaded on Factor 2 with 19.136 percent, three items loaded on Factor 3 with a variance of 18.255 percent and three items loaded on Factor 4 with a variance of 14.446. The total variance achieved is 71.249 percent. All the Cronbach's Alpha value were between 0.698 and 0.894 meeting the acceptable value by Sekaran (2005) and Hair et al. (2006) which is 0.6.

b) Knowledge Sharing Quality

Principal Component Analysis (PCA) was also performed for the 6 items of the knowledge sharing quality measures. The result shows that Kaiser-Meyer-Olkin of Sampling Adequacy (KMO) value is 0.813. This value is excellent because it exceeds the recommended value of 0.6 (Kaiser, 1974; Pallant 2001) and the Bartlett's Test of Spehericity is significant (0.000). The results (KMO and Bartlett's test) suggest that the sampled data is appropriate to proceed with a factor analysis procedure. The PCA extracted one distinct component with eigen values exceeding 1.0. Six items were loaded unidimensionally with the variance of 53.65 percent. The results are presented in Table 4 and 5 below.

Table 7: KMO and Bartlett's Test for Trust Instrument

Kaiser-Meyer-	0.813	
Bartlett's Test of	878.067	
Sphericity Df		15
	0.000	

Table 8: Factor Analysis and Reliability Test Result on Service Delivery

Knowledge sharing quality	Component 1
Q3. Knowledge that I share with my colleagues in my organization is accurate.	.780
Q5. Knowledge that I share with my colleagues in my organization is reliable.	.773
Q6. Knowledge that I share with my colleagues in my organization is timely	.730
Q2. Knowledge that I share with my colleagues in my organization is easy to understand.	.723
Q4. Knowledge that I share with my colleagues in my organization is complete.	.695
Q1. Knowledge that I share with my colleagues in my organization is relevant to my job.	.689
Cronbach Alpha	0.827
Eigenvalues	3.29
Percentage of common variance	53.651
Cumulative percentage	53.651

Overall, the results statistically show that the items used in the study are valid and measure what it is supposed to measure. The instrument is reliable since with high consistencies with acceptable Cronbach Alpha more than 0.80 meeting the acceptable value of 0.60 (Sekaran, 2005; Hair et al., 2006) and 0.70 (Nunnally, 1978).

Test of Relationship

To identify the relationship between knowledge sharing quality and service delivery, correlation analysis was conducted. Correlation analysis indicates the strength of bivariate relationship between the independent and dependent variables under studied. The result of the correlation analysis is shown in Table 9 below.

Table 9: Correlation Analysis

	Mean	Standard		Org.	Reward &	Office
·		Deviation	Org. Culture	Structure	Recognition	Layout
Org. Culture	4.12	.499	1.000			
Org. Structure	3.26	.741	0.198**	1.000		
Reward & Recognition	2.46	.964	-0.111	-0.169**	1.000	
Office Layout	3.64	.768	0.236**	0.067	0.075	1.000
Knowledge sharing quality	3.93	.367	0.335**	0.099*	0.019	0.167**

^{**} p< 0.01, * p<0.05

The above analysis shows that all the variables are significantly correlated with knowledge sharing quality except reward and recognition. It indicates that organizational culture (r=0.335, p<0.01), office layout (r=0.167, p<0.01) and organizational structure (r=0.099, p<0.05) have shown significant correlations with knowledge sharing quality among government officers. However, reward and recognition show no significant relationship with knowledge sharing quality.

A multiple regression was conducted to identify the strongest predictor and how much variance in knowledge sharing quality explained by organizational factors. Table 10 show the results of multiple regression analysis.

Table 10 Results of Regression Analysis

	Dependent variable
	Knowledge sharing quality
Independent variables	(Beta Standardised Coefficient)
Organizational Culture	0.312*
Organizational Structure	0.041
Rewards & Recognition	0.054
Office Layout	0.087
F value	15.002*
R ²	0.124
Adjusted R ²	0.116

^{*} p < 0.01

The results of multiple regression shows that a relationship exists between the organizational factors and knowledge sharing quality. The model is significant (p<0.01) with F-value of 15.002. The coefficient of determination (R^2) is 0.124, which indicates that 12.4% of the variance in knowledge sharing quality was explained by

the independent variables (organizational culture, organizational structure, reward & recognition and office layout). The Beta value (standardised coefficient) for each of the variables is as follows: Organizational culture (b=0.312), organizational structure (b=0.041), rewards & recognition (b=0.054) and office layout (b=0.087). The results indicate that only organizational culture has a significant positive relationship with knowledge sharing quality at p<0.01. Therefore it can be concluded that only H1 (organizational culture has a significant relationship with knowledge sharing quality) was supported. Hypothesis H2, H3 and H4 were rejected.

CONCLUSION

The main purpose of this study is to identify the relationship between organizational factors and knowledge sharing quality. The results obtained support the objective of the study. As anticipated, organizational factors was found to have a positive significant relationship with knowledge sharing quality. The findings also indicate that organizational culture is the most significant predictor on knowledge sharing quality. This is in line with previous study by Syed Omar (2005), Liebowitz & Chen (2003) and Rubenstein-Montano et al. (2001). The results of the study could help the government of Malaysia to come up with a policy that encourages knowledge sharing among employees. It is crucial for the government to promote knowledge sharing culture among civil servants in order to increase knowledge sharing quality. Quality knowledge will lead to improvement in public sector service delivery (Mohd Bakhari, Zawiyah & Syed Omar, 2008). However the transformation of the organizational culture is impossible without the participation of people in the organization (Al-Hawamdeh, 2003). The big challenge is how to foster knowledge sharing culture among employees because some employees consider 'knowledge is power'.

This study has several limitations. Firstly, the scope of the study was limited to three agencies located in Putrajaya. Therefore, in terms of external validity in generalizing all government agencies are questionable. Secondly, the study only used quantitative approach. It is recommended that qualitative approach can be taken into consideration to get better understanding of the problem. Thirdly, study on organizational factors and knowledge sharing at state, district level or local councils also recommended. A comparative study between public sectors and private sectors can also be conducted. Finally, the study focused on organizational factors only. It is recommended that future research consider other aspects such as technological, individual or environmental factors to have better understanding of the problem.

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