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EMPLOYEES' COMPETENCIES AND INFORMATION COMMUNICATION TECHNOLOGY AS DETERMINANTS OF ORGANIZATIONAL LEARNING CAPABILITIES (OLC)

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ABSTRACT

This paper examined the perceptions of librarians on OLC and knowledge performance and the relationships among OLC dimensions. A survey method using questionnaires was distributed to fifty librarians at one Malaysian public university library and thirty-six (72%) of the questionnaires were returned and usable for analyses. From the findings, the OLC's dimensions on employees' skills and competencies was ranked as the highest (mean=5.76) indicating that it was the most preferred response as perceived by the respondents. A moderate and positive relationship also existed between employees' skills and competencies and knowledge performance ($p<0.01$, $r=0.758$). The findings were important to the librarians and the libraries for enhancing the skills of acquiring knowledge and learning capabilities for better knowledge performance. The importance of the study is expected to assist the academic library and interested researchers to provide effective baseline information in constructing a robust model for similar studies. This research is useful not only to the libraries but also to the organizations that use acquired knowledge and learning skills for their performance measurements.

Keywords: Employees' skills and competencies, Information communication technology (ICT), Knowledge performance, Academic librarian

INTRODUCTION

Organizational learning has become a main concept that covers variation of topics in the organizations study such library (Kassim and Shoid, 2013; Rowley, 2000). According to Aghdasi & Bafruei (2009) measuring organizational learning capability is the most important issue in organizational studies. In addition, learning capability, explore and suitable change are an important capability that play as a substantial keys for learning; also providing suitable changes in a humanistic collection in today's aggressive world. Besides, organizational learning capabilities have been considered as an active process that will result to the openness, experimental capability, knowledge transfer and integration capability (Mohammadkarim et al., 2012).

Meanwhile, librarians in organizations such as academic libraries are specialized in learning and knowledge work process. They work in three areas which are user services, the task of administrative services and technical services. However, nowadays, their tasks have been challenged by increasingly complex and constant change in the organizational, technological and information environment. Librarians need to stay update with new technologies and systems, new forms of information, information media and information sources, tasks and roles. Indeed, the main role of libraries in higher learning institutions is to nurture and instil necessary higher learning skills and knowledge capabilities among individuals or group by presenting existing or creating new knowledge (Rowley, 2000; Shoid and Kassim, 2012).

In this study, there are two research questions based on the two OLC's dimensions (employees' skills and competencies, and ICT). The research questions are;

1. What do librarians perceived regarding the OLC's dimensions (employees' skills and competencies, and ICT) and knowledge performance?
2. Are there relationships between the OLC's dimensions (employees' skills and competencies, and ICT) and knowledge performance?

LITERATURE REVIEW

Organizational Learning Capabilities (OLC)

According to Dibella et al. (1996) and Goh & Richards (1997), organizational learning capability is the organizational and managerial elements that facilitate the organizational learning process or allowing the organization to learn. Full attention has been given to the growth of organizational learning capability by scholars. After few studies, it shows that organizational learning capability play as an important role for innovation. Besides, it can be shown that organizations have increased to learn and it is a critical factor for organization to grow and innovate (Goh, 1998; Hult et al., 2004; Jerez-Go' et al., 2005). In addition, failure is the key for the effective organizational learning, e.g. interaction with the external environment making refers to the relationships with the organizational external environment (Alegre and Chiva, 2008)

An organizational learning capability is the learning process for each of the organization who practices it (Fang et al., 2011). Therefore, any changes resulted from the learning process may drive to the recovery, or maintenance of organizational function (Alegre and Chiva, 2008). Organizational learning capabilities has become as important element to enhance the growth and innovation of one organization. Besides, a collection of resources of tangible and intangible skills are necessary to use competitive advantages. Organizational learning capabilities are also known as a formation of capacity and combination of ideas in an efficient way in contact with an assortment of organizational borders and through special managerial methods and innovations (Rashidi et al., 2010).

There are two dimensions of organizational learning capabilities identified in this study. Each of the dimensions of the organizational learning capabilities has been cited by previous scholars (Goh and Richards, 1997; Neefe 2001). These dimensions are employees' skills and competencies.

Employees' Skills and Competencies

In order to develop the employees' performance in their present and future tasks, employees' skills and competencies which are based on career development is important to be implemented (Azmi et al. 2009). Employees' skills and competencies are special ability which is characterized by representing, at society defined level, the ability to behave adequately and to take responsibility for one's behavior. Through employees' competencies, it allows the access and reflects one another works among employees and also to take the responsibility for the results of the work (Ordon, 2008). Malikeh, Rezvan & Mahmood (2012) affirmed those employees' skills and competencies has the potential to go far beyond technical skills and managerial abilities on specific organizations' growth plan.

Information Communication Technology (ICT)

Chou (2003) stated in his study that organizational learning using computer systems give a positive impact on the organizational learning process. Moreover, it is one kind of systems that is enriched with knowledge acquisition, knowledge distribution, broadcasting, updating

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and memory features. On the other hand, librarians and information professionals are facing complex tasks and exciting future as the results from the rapid change of technologies. Meanwhile, Bhatt et al (2005) mentioned that collaboration support systems are integrated information and communication technologies that facilitated communication and connectivity among individuals in supporting organization's collaboration during performance.

Knowledge Performance

Organizational learning has become an important criterion to determine growth and success. According to the managers' responses from three different global organizations, organizations are doing well in the area of organizational learning through the human resource management practices. Hence, it is reflected in organizational performance and financial reports rating. Positive and vital correlation is found among the measures of organizational performance and organizational learning (Aradhana and Anuradhana, 2006).

A study by Nasher & Khairuddin (2006) stated that there are strong relationship between all learning organization dimensions and also knowledge performance measure. Relationships between self-managed work-teams and the learning organizations dimensions by using four measures of performance: knowledge performance, financial performance, customer satisfaction and turnover play as a medium (Power and Waddell, 2004).

METHODOLOGY

Quantitative approach has been used in this study. In this preliminary study, self-administered questionnaires were distributed to fifty selected librarians in one university library in Malaysia. From the feedback, only 72% of the respondents had responded. The questionnaire was measured on a 1 (strongly disagree) through 7 (strongly agree) Likert Scale which was divided into 3 dimensions with the following order: Employees' skills and competencies (7 items), Information Communication Technology (7 items) and Knowledge performance (14 items). For data analyses, descriptive and inferential statistical analyses were performed using the SPSS.

RESULTS, ANALYSIS AND DISCUSSION

Reliability Test

The reliability test results indicated the cronbach's alpha value of three variables of interest. It shows employees' skills and competencies (0.963), information communication technology (0.963) and knowledge performance (0.964) have exceeded 0.7. The value of this coefficient was considered high and acceptable thus satisfying the validity assumption of the items in the respective dimensions.

Table 1. Reliability Analysis

No.	*Variable*	*Cronbach's Alpha*	*Number of Items*
1.	Employees' Skills and Competencies	0.963	7
2.	ICT	0.963	7
3.	Knowledge Performance	0.964	14

Profile of Respondents

The summary statistics for the profile of the 36 respondents are presented. The sample was made up of two-thirds of females (66.7%) and one-third males (33.3%), a large proportion of middle management staff (88.9%) compared with senior management staff (11.1%) and a slightly higher proportion of a bachelor degree holders (58.3%) compared with a master's

degree holders (41.7%). There was also a relatively higher proportion of females with a master's degree (45.8%) compared with their male counterparts (33.3%). When segregating according to their respective departments, 30.6% of them worked in the Automation and IT, 22.2% in the Catalogue and Classification, 16.7% in the Acquisition, 16.7% in the Reference Service and 13.9% in the Circulation. Majority of the departments (55.6%) have organized the knowledge activities once a month with 27.8% from the Automation and IT, 22.2% from the Catalogue and Classification, 16.7% from the Acquisition, 16.7% from the Reference Service and 2.8% from the Administration.

Ranking of Level of Perception

All the variables were then arranged in rank order with the highest mean which was considered as the most preferred response. The results showed that on the average, the perception of the respondents on the three dimensions were very similar and moderately positive. The highest mean scores was 5.76 (employees' skills and competencies) followed by 5.73 (ICT) and 5.72 (knowledge performance) as shown in Table 2. Thus, employees' skills and competencies were regarded as the most preferred response as perceived by the targeted respondents.

Table 2. Ranking of the level of perceptions

No.	*Dimensions*	*Mean Scores*	*Standard Deviations*
1	Employees' skills and competencies	5.76*	0.540
2	ICT	5.73	0.740
3	Knowledge performance	5.72	0.457

* The higher mean score, the more preferred response for the dimension

Perceptions on Employees' Skills and Competencies

Table 3 shows the mean scores of perceptions on employees' skills and competencies statements. On the average, the respondents were moderately positive towards their employees' skills and competencies. The mean scores of the seven individual items were quite similar, ranging from 5.50 (*Employees have skills to work on challenging assignments*) to 6.02 (*The skills that are gained from the training or activities helps in improving my quality of works*), hence, also indicating a moderate positive perception towards their employees' skills and competencies.

Table 3. Results of Mean Score by Employees' skills and competencies

Employees Skills and Competencies: In my library	*Mean*	*Std Deviation*
1. The skills that are gained from the training or activities helps in improving my quality of works	6.02	0.774
2. Teamwork helps in improving communication skills	6.00	0.783
3. Employees use full skills and abilities to accomplish the given tasks or assignment	5.78	0.690
4. Employees have skills on understanding different perspectives of position in organization	5.76	0.670
5. Each employees is required to upgrade knowledge, skills and abilities	5.72	0.741
6. Management skills such as leadership, coaching and team building have been widely stressed in organization	5.53	0.670
7. Employees have skills to work on challenging assignments	5.50	0.660
Overall	5.76	0.540

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Perceptions on Information Communication Technology (ICT)

The mean scores in Table 4 also indicates that on the average the respondents have moderately positive perception towards information communication technology (ICT), but with a slightly lower score than employees' skills and competencies. Among the statements, the respondents were most positive (5.94) that *employees are required to adapt with the ICT knowledge era* but *least positive* that orientation program or user orientation is handled by librarians with ICT background (5.56). Most also agree that *employees need to be computer literate and familiar with office software* (5.83), *and user orientation is organize in order to create the information communication technology (ICT) literacy* (5.78). Respondents also agree that *employees have to attend the information technology classes both inside or outside of the organization* (5.70). The rest of the items were scored lower, between 5.56 and 5.63, indicating a less positive perception on the statements.

Table 4. Results of Mean Score by Information communication technology (ICT)

ICT: *In my library*	*Mean*	*Std Deviation*
1. Employees are required to adapt with the ICT knowledge era	5.94	0.630
2. Employees need to be computer literate and familiar with office software	5.83	0.740
3. User orientation is organized in order to create the information communication technology (ICT) literacy	5.78	0.640
4. Employees have to attend the information technology classes both inside or outside of the organization	5.70	0.670
5. Higher management has created new roles by assessing changes in the ICT	5.63	0.690
6. Employees have to continue monitoring the emerging of technologies	5.63	0.640
7. Orientation program or user orientation is handled by librarians with ICT background	5.56	0.734
Overall	5.73	0.740

Perceptions on Knowledge Performance

Table 5 exhibits the mean scores of perceptions by respondents on knowledge performance. On the average the respondents were more positive towards their knowledge performance. Specifically, more respondents perceived that *feedback from clients helps to improve services* (5.94), *information skills program helps to determine user satisfaction* (5.89) and *librarian's exchanges knowledge inside and outside the organization* (5.86).

Table 5. Results of Mean Score by Knowledge performance

Knowledge Performance: In my library	*Mean*	*Std Deviation*
1. Feedback from clients helps to improve services	5.94	0.630
2. Information skills program helps to determine user satisfaction	5.89	0.708
3. Librarians exchanges knowledge inside and outside the organization	5.86	0.639
4. Specific skills are needed for future tasks	5.75	0.692

Knowledge Performance: In my library	*Mean*	*Std Deviation*
5. Knowledge is improved and skills are updated in order to achieve organization's vision and mission	5.75	0.649
6. Knowledge on new materials is acquired	5.72	0.615
7. Embedding knowledge such as planning, design and service are practiced	5.72	0.513
8. Information about external clients is gathered	5.70	0.577
9. Enhancement of knowledge and skills give benefits to the organization	5.69	0.525
10. Existing knowledge helps to generate new information	5.67	0.632
11. Effective knowledge is acquired and shared with others	5.64	0.723
12. Employees' competencies in solving problems are needed	5.61	0.688
13. The number of users learning new skills is increasing	5.61	0.599
14. Knowledge about internal clients is acquired	5.56	0.939
Overall	5.72	0.457

Relationships between OLC dimensions and knowledge performance

The results of the Pearson's coefficient correlation test show that employees' skills and competencies was moderately and positively correlated with knowledge performance ($p < 0.01$, $r = 0.758$) followed by employees skills and competencies with ICT ($p < 0.01$, $r = 0.749$) and ICT with knowledge performance ($p < 0.01$, $r = 0655$). Hence, the results revealed significant positive relationships between all variables at the confidence level of 1%.

Table 6. Relationships between OLC dimensions and Knowledge performance

Variable	*Statistics*	*ESC*	*ICT*	*KP*
Employees' skills competencies (ESC)	Pearson Correlation	1.000	0.749**	0.758**
	Sig. (2-tailed)		<0.001	0.001
Information communication technology (ICT)	Pearson Correlation	0.749**	1.000	0.655**
	Sig. (2-tailed)	.<0.001		0.001
Knowledge performance (KP)	Pearson Correlation	0.758**	0.655**	1.000
	Sig. (2-tailed)	0.001	0.001	

**Significant at 0.01 level (2-tailed)

CONCLUSION

From the study, it can be concluded that among the variables, employees' skills and competencies were the most preferred dimension perceived by the respondents. A moderate and positive relationship exists between employees' skills and competencies and ICT. Among the two OLC dimensions, employees' skills and competencies has a higher correlation with knowledge performance than ICT. Therefore, these positive results of librarian's perceptions on OLC are an indication of the right lane towards a better performance in the library. Future study can expand other OLC variables with more targeted respondents. The outcome of the study is expected to improve the skills of acquiring

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knowledge and enhance the organizational learning capabilities of librarians in academic libraries.

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