

KNOWLEDGE MANAGEMENT PRACTICES: A COMPARATIVE STUDY OF PUBLIC AND PRIVATE SECTOR UNIVERSITIES AT LAHORE

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ABSTRACT

Main purpose of the study was to compare the knowledge management practices of teachers of public and private sector universities. The study was descriptive in nature and a survey was conducted. Statistical population included teachers from universities (public 10 and private 14) at Lahore that were selected by stratified random sampling technique. Knowledge Management Assessment Tool was used to collect data from the respondents. Cronbach's alpha coefficient was calculated to ensure the reliability of the Tool, which was (0.92). A total of 400 questionnaires were distributed, out of which 327 questionnaires returned. T-test was applied to find out the means difference between public and private sector universities. The findings of the study revealed a no significant difference of knowledge management practices between public and private sector universities regarding process, culture, technology and measurement. Whereas, significant difference of knowledge management practices between public and private sector universities regarding the leadership, private universities have better knowledge management practices regarding leadership in knowledge management.

Keywords: *knowledge management, University teachers*

1) INTRODUCTION

Knowledge management is a broad view of structure and procedures that depends on the construction, assortment, storage, recovery, spreading and application of association knowledge that is an inter-disciplinary modification in the educational world especially in the administration (Lawson, 2003). From the view of majority researchers, application of knowledge is the most important process. They claim that competitive advantage does not belong to the organizations which have the best knowledge assets but, it belongs to organizations that are using the best of their knowledge in practice (Singh, Shankar & Kumar, 2006). If knowledge

does not change into practice and organizational activities are not based on the knowledge, all the activities and processes of knowledge management are disinfected and sluggish (Najm, 2008). Knowledge is valuable when it is used. It not only affects the actions and strategic plans, but also their impacts on daily activities of the organization are observed (Binder & Fish, 2001; Soo, Devinney, Midgley & Deering, 2002). There are number of different dimensions of knowledge management but in this study five knowledge management dimensions are explored. These dimensions are presented by American Production and Quality Center and author Anderson which are KM process, leadership in KM, KM culture, KM technology, and KM measurement.

Knowledge management processes consist of discovery, capture, sharing and application. Each process is supported by a set of sub processes, such as combination, socialization, externalization, internalization, exchange, direction and routines (Fernandez & Sabherwal, 2010). The definitions of four processes as given (Fernandez & Sabherwal, 2004). Knowledge Discovery: to develop the tacit or explicit knowledge from data and information or from the prior knowledge. Knowledge Capture: to retrieve tacit or explicit knowledge that existing in people, artifacts or organizational entities. Knowledge Sharing: to communicate to other individuals about tacit or explicit knowledge. As the spread of internet technologies, knowledge sharing may occur between business partners, departments and personnel. Knowledge Application: to establish effective application in making-decision and task performance depends on the better processes of knowledge discovery, capture and sharing.

Knowledge management requires informed leadership and participative management and in the culture of educational environment where critical and creative thinking is considered as the dominant value. This creative thinking is as a key and instrumental factor in knowledge management (Singh, 2008; Smith, 2000; Soo, 2002). Creating knowledge-based universities and using model of knowledge management and information technology in universities can upgrade the speed, quality and utility of education services. And to develop this in universities, all systematic changes that due to reconstruction, interaction and engagement of knowledge must be encouraged and supported (Salgi, 2011; Stacey, 2000; Storey, 2000).

The organizational culture is another important dimension in knowledge management. Firstly, the organizational culture could be a belief, and could reflect the work attitude of employees. Next, to modify organizational culture can address the biggest challenge that KM vendor faces (Awad & Ghaziri, 2004). Last but not the least, the trust among employees has been not only a precedent condition for the organizational behaviors, but also it is the basis of organizational culture (Chalwa & Joshi, 2010).

Grant (2000) indicated the value of digital technology from a productivity perspective. The knowledge has not only been held by people, but also has been held by digital technology. The technology may provide the possibilities of knowledge replication. Grant suggests that explicit knowledge offers greater potential for value creation because of its replicable potential. And codification of turning tacit knowledge to explicit knowledge can also support the rapid rates of economic growth through replication technology. Moreover, it will accelerate as the new arrival of technology (Grant, 2000; Mcdermott, 1999; Newell, 2002).

Knowledge management can be used as an alternative strategy to assist teachers with the related skills to deal with challenges to improve performance in schools as well as commercial sectors. However, a few researches have been done on how to apply knowledge management in universities. In the beginning, for applying knowledge in practice, teachers' understanding of knowledge management is very important (Chu, Wang & Yuan, 2011). Universities with a large population of students and teachers are known as the most important breeding ground of society intellectual and knowledge capital. Education invests in people intellectual capital and the role of university teacher in this regard is very important. Carol believes that knowledge management in universities is a challenge that we need to consider it. Although the culture of the universities is not unique and special but it is highly regarded personal (Salgi, 2011).

1.1) Objective of the Study

Main objective of the study was to compare the knowledge management practices of teachers of public and private sector universities at Lahore, Pakistan.

1.2) Hypotheses

To meet the above mentioned objective following null hypotheses were formulated:

- Ho1:** There is no significant difference of knowledge management process between public and private sector universities.
- Ho2:** There is no significant difference of knowledge management culture between public and private sector universities.
- Ho3:** There is no significant difference of leadership in knowledge management between public and private sector universities.
- Ho4:** There is no significant difference of knowledge management technology between public and private sector universities.
- Ho5:** There is no significant difference of knowledge management measurement between public and private sector universities.

2) RESEARCH METHODOLOGY

In this research quantitative research technique and cross-sectional research design was used to explore the knowledge management practices of teachers of public and private sector universities at Lahore. The study was descriptive in nature and a survey was conducted. The population of the study was consisted of all the public (10) and private sector (14) HEC recognized universities of Lahore. Multistage stratified random sampling technique was used to select the sample. At first stage three universities each between public and private sector were selected randomly. At the second stage faculties were selected randomly from those universities. At the third stage departments were randomly selected and at the last stage teachers were randomly selected. Tool developed by the American Productivity and Quality Center by Arthur Anderson was used to collect data from the respondents. This instrument consists of 24 items and further divided into five dimensions namely: KM process, Leadership in KM, KM culture, KM technology, KM measurement. Cronbach's alpha coefficient was calculated to ensure the reliability of the instrument, which was (0.92). The researcher visited each university personally and administer the instrument. A total of 400 questionnaires were distributed, in which 327 questionnaires returned. Descriptive statistics techniques were applied to find out mean, standard deviation and percentage. While inferential statistics technique, t-test was applied to compare the difference between public and private sector universities.

3) RESULTS

Table 1: Frequency and Percentage of Demographical Variables

Variables	Frequency	Percentage
Gender of teachers		
Male	161	49.2
Female	166	50.8
Qualification of teachers		
Master	76	23.2
M. Phil	154	47.1
Ph. D	97	29.7
Teaching experience		
1-5	160	48.9
5-10	82	25.1
10-15	44	13.5
Above 15	41	12.5
Designation		
Lecturer	171	52.3
Assistant professor	120	36.7
Associate Professor	19	5.8
Professor	17	5.2
University type		
Public	191	58.4
Private	136	41.6

The above table shows the details of demographic variables, which indicated that 49.2% males and 50.8% females participated in this study, among those 23.2% were having Master degree, 47.1% M. Phil and 29.7% Ph. D. As for as teaching experiences is concern 48.9% were having experience between 1- 5 years, 25% were 5-10 years, 13.5% were 10-15 years and only 12.5% were having more than 15 years teaching experience. In subjects of the study 52.3% were lecturer, 36.7% Assistant Professor, 5.8% Associate Professor and only 5.2% Professors; further 58.4% were from public and 41.6% percent from private universities.

Table 2: Ho1: There is no significant difference of knowledge management process between public and private sector universities.

Variable	N	Mean	SD	df	t	Sig.
Public	191	16.70	3.363	325	-1.378	.981
Private	136	17.21	3.200			

The results of table 2 show that t-value (-1.378) with $df = 325$ is significant at $P \leq 0.05$ level of significance. The mean score for both variable is ($M=16.70$, $S.D=3.363$), ($M=17.21$, $S.D=3.200$) respectively. It revealed that there is no significant difference of knowledge management process between public and private sector universities.

Table 3: Ho2: There is no significant difference of leadership in knowledge management between of public and private sector universities.

Variable	N	Mean	SD	df	t	Sig.
Public	191	14.24	2.971	325	-2.913	.001
Private	136	15.12	2.215			

Table 3 results state that t-value (-2.913) with $df = 325$ is significant at $P \leq 0.05$ level of significance. The mean score for both variable is ($M=14.24$, $S.D=2.971$), ($M=15.12$, $S.D=2.215$) respectively. It revealed that there is significant difference of leadership in knowledge management between public and private sector universities. Private universities have better knowledge management practices regarding leadership in knowledge management.

Table 4: Ho3: There is no significant difference of knowledge management culture between public and private sector universities.

Variable	N	Mean	SD	df	t	Sig.
Public	191	18.72	3.176	325	.200	.476
Private	136	18.65	2.811			

According to the results of table 4 that t-value (.200) with $df = 325$ is significant at $P \leq 0.05$ level of significance. The mean score for both variable is ($M=18.72$, $S.D=3.176$), ($M=18.65$, $S.D=2.811$) respectively. It revealed that

there is no significant difference of knowledge management culture between public and private sector universities.

Table 5: Ho4: There is no significant difference of knowledge management technology between of public and private sector universities.

Variable	N	Mean	SD	df	t	Sig.
Public	191	21.10	4.442	325	-1.505	.005
Private	136	21.77	3.232			

Table 5 denotes that t-value (-1.505) with $df=325$ is significant at $P \leq 0.05$ level of significance. The mean score for both variable is ($M=21.10$, $S.D=4.442$), ($M=21.77$, $S.D=3.232$) respectively. It revealed that there is no significant difference of knowledge management technology between public and private sector universities.

Table 6: Ho5: There is no significant difference of knowledge management measurement between public and private sector universities.

Variable	N	Mean	SD	df	t	Sig.
Public	191	13.19	3.000	325	-1.91	.965
Private	136	13.60	3.151			

The results of table 6 illustrate that t-value (-1.91) with $df=325$ is significant at $P \leq 0.05$ level of significance. The mean score for both variable is ($M=13.19$, $S.D=3.000$), ($M=13.60$, $S.D=3.151$) respectively. It revealed that there is no significant difference of knowledge management measurement between public and private sector universities.

4) DISCUSSION

The main purpose of the study was to compare the knowledge management practices of teachers of public and private sector universities. The table 2 denotes the mean value and standard deviation of public university teachers is 16.70 and 3.363, the mean and standard deviation of private university teachers is 17.21 and 3.200 regarding knowledge management process. It shows that private universities have better knowledge management practices regarding knowledge management process but it is not significant at $p \leq 0.05$. These results are consistent with

study results of these researchers (Ramachandran, Chong & Ismail, 2009). Also these findings are almost similar to the study of Yaakub, Othman, and Yousif, (2014). According to the result of this study, the average value and standard deviation of public university teachers is 18.72 and 3.176, the mean and standard deviation of private university teachers is 18.65 and 2.811. It shows that there is no significant difference regarding knowledge management culture between public and private universities at $p \leq 0.05$. These results are consistent with studies results of these researchers (Chu, Wang & Yuan, 2011; Ramachandran, Chong & Ismail, 2009).

It revealed from this study that the mean value and standard deviation of public university teachers is 21.10 and 4.442, the average value and standard deviation of private university teachers is 21.77 and 3.232. It shows that there is no significant difference regarding knowledge management technology between public and private universities at $p \leq 0.05$. According to the result of this study, the mean value and standard deviation of public university teachers is 13.19 and 3.000, the average value and standard deviation of private university teachers is 13.60 and 3.151. It shows that there is no significant difference regarding knowledge management measurement between public and private universities at $p \leq 0.05$. These results are consistent with studies results of these researchers (Ramachandran, Chong & Ismail, 2009).

The results of this study show that the mean value and standard deviation of public university teachers is 14.24 and 2.971, the mean and standard deviation of private university teachers is 15.12 and 2.215. It shows that private universities have better knowledge management practices regarding leadership in knowledge management but it is significant at $p \leq 0.05$. These results are consistent with studies results of these researchers (Balan, 1990; Day & Klein, 1987; Mintzberg, 1993; Patrinos, 1990).

5) CONCLUSIONS

It is concluded that there is no significant difference of knowledge management practices between teachers of public and private sector universities regarding process, culture, technology and measurement. However, significant difference of knowledge management practices between public and private sector universities regarding the leadership. Result shows that private universities have better knowledge management practices regarding leadership in knowledge management.

REFERENCES

- Awad, E. M., & Ghaziri, H. M. (2004). *Knowledge Management*, Prentice Hall, New York, USA.
- Balan, J. (1990). Private universities within the Argentine higher educational system, trends and prospects, *Higher Education Policy*, 3(2), 13-17.
- Binder, S., & Fish, A. (2001). Transfer knowledge and maintain skills: the need for a continuous process of globalization. *Journal of Modirsaz*, 3(4), 10-30.
- Chalwa, D., & Joshi, H. (2010). Knowledge management practices in Indian industries – a comparative study. *Journal of Knowledge Management*, 14(5), 708-725.
- Chu, K. W., Wang, M., & Yuen, A. H. K. (2011). Implementing knowledge Management in School Environment: Teachers' perception. *Knowledge Management & ELearning. An International Journal*, 3(1), 139-141.
- Day, P. & Klein, R. (1987). *Accountabilities in Five Public Services*, Tavistock, London.
- Fernandez, B. I., & Sabherwal, R. (2010). *Knowledge Management Systems and Processes*, M.E Sharpe, New York, USA.
- Fernandez, B. I., Gonzalez, A. & Sabherwal, R. (2004), *Knowledge Management: Challenges, Solutions, and Technologies*, Pearson Prentice Hall, New York, USA.
- Grant, R. M. (2000). *Shifts in the world economy: The drivers of knowledge management*, In Despres, C., Chauvel, D. (Eds.), *Knowledge Horizons*. Woburn, MA: Butterworth Heinemann.
- Lawson, S. (2003). *Examining the relationship between organization culture and knowledge management*. Doctoral Thesis, H. Wayne Huizenga School of Business and Entrepreneurship Nova Southeastern.
- Mcdermott, R. (1999). Why information technology inspired but cannot deliver knowledge management. *California Management Review*, 41(4), 103-17.
- Mintzberg, H. (1993). *Structure in Fives: Designing Effective Organizations*, Prentice-Hall, Eaglewood Cliffs, NJ.
- Najm, D. M. (2008). Knowledge management and its role in organizational innovation. *Journal of Industrial Engineering*, 1(10), 47-52.
- Newell, S., Robertson, M., Scarbrough, H., & Swan, J. (2002). *Managing Knowledge Work*, Palgrave, London.

- Patrinios, H. A. (1990). The privatization of higher education in Columbia, effects on quality and equity, *Higher Education*, 20(2), 161-73.
- Ramachandran, Chong, & Ismail. (2009). The practice of knowledge management processes: A comparative study of public and private higher education institutions in Malaysia. *The Journal of Information and Knowledge Management Systems*, 39(3), 203-222.
- Salgi, H. A. (2011). Knowledge management in schools. *Journal of Cheshmandaz*, 8, 26-28.
- Singh, M. D., Shankar, R., Narain, R., & Kumar, A. (2006). Survey of knowledge management practices in Indian manufacturing industries. *Journal of Knowledge Management*, 10(6), 110-28.
- Singh, S. K. (2008). Role of leadership in knowledge management. *Journal of Knowledge Management*, 12(4), 3-15.
- Smith, E. A. (2000). Applying knowledge-enabling methods in the classroom and in the workplace. *Journal of Workplace Learning*, 12(6), 236-44.
- Soo, C., Devinney, T., Midgley, D., & Deering, A. (2002). Knowledge management: philosophy, processes, and pitfalls. *California Management Review*, 44(4), 129-49.
- Stacey, R. D. (2000). The emergence of knowledge in organizations, *emergence*, 2, 23-39.
- Storey, J., & Barnett, E. (2000). Knowledge management initiatives: learning from failure. *Journal of Knowledge Management*, 4(2), 145-156.
- Yaakub, M, B., Othman, K., & Yousif, A, F. (2014). Knowledge management practices in Malaysian higher learning institutions: a review on selected cases. *International Journal of Education and Research*, 2(1), 1-10.