

KNOWLEDGE SHARING AMONG FACULTY MEMBERS IN RESEARCH INSTITUTES IN IRAN

Asgar Zamani

Assistant Professor, Department of Higher Education Management Studies,
Institute for Research and Planning in Higher Education
ofogh557@yahoo.com

ABSTRACT

This study examines the factors influencing knowledge sharing among faculty members at research institutes in Iran. In order to achieve this goal, with 14 experts and faculty members of research institutes of Iran were interviewed. Analysis of the content of the interviews indicated that individual internal motivators, external motivators, willingness to share knowledge with fellow faculty members, personal interaction and a group of faculty members, interpersonal context, inter-organizational context, perspectives in knowledge production in research institutions, in the process of knowledge sharing among faculty members research institutes in Iran affected.

Also, the results revealed that faculty members in technical and engineering research institutes have higher personal and group interactions with their colleagues compared to humanities faculty members at research institutes. Finally, results showed that technical and engineering faculty members have a greater tendency to collect knowledge from their colleagues in comparison to humanities faculty groups.

Keywords: Knowledge sharing; faculty members; higher education; research institutes.

INTRODUCTION

Universities and higher education institutes have always used and benefited from innovations, philosophies, strategies and techniques of the private and commercial section to achieve their academic goals and create strategic knowledge. One of these concepts and innovations is knowledge management concept, which has been borrowed from business and commerce studies and indeed refers to knowledge management systems that are used for improving the teaching and learning processes in academic settings (Mamta & Jayanthi, 2012).

Furthermore, in recent decades, due to new challenges and ever increasing changes in higher education ecosystem, the issue of knowledge management has been an important topic for discussion in academic circles. (Rowley, 2000; Piccoli et al, 2001; Coukos-Semmel, 2002; Martin & Marion, 2005; Corbitt et al, 2005; MacCarthy, 2006; Biloslavo & Trnavcevic, 2007; Tikhomirova et al, 2008; Lee & Roth, 2009; Blackman & Kennedy, 2009; Adhikari, 2010; Howell & Annansingh, 2012).

Therefore, knowledge creation, expansion, distribution and institutionalization in organizations, is a complex issue which has attracted a significant amount of attention in academic and management literature. (Choo & Bontis, 2002; Davenport & De Long, 1998; Davenport & Prusak, 2000).

Of course, the knowledge management is not merely about technology management; rather it involves people's management in organizations so that they can share their knowledge efficiently and effectively. The higher education entities have realized that through knowledge-building strategies, the faculty members and students' organizational activities will be expanded and the possibility of strategic planning and decision making and moving toward a learning organization is increased (Kidwel et al, 2000). Furthermore, the researchers and experts believe that knowledge sharing is an essential part of effective knowledge management (Alavi & Leidner, 2001).

In general, the knowledge management process includes knowledge creation, knowledge transfer or sharing and knowledge coding (Grover & Davenport, 2001:p7).

However, in knowledge management literature, three notions including knowledge sharing, knowledge transfer and knowledge flow are used interchangeably to describe the information and knowledge transfer among individuals and within the entire of an organization (Mulligan, 2001), but we can describe the knowledge sharing as activities to disseminate knowledge from a person, group or organization. This process widely covers both implicit and explicit knowledge (Lee, 2001: p 324). Also, we can describe the knowledge sharing as an organized sharing information, ideas, suggestions and experiences of a person with another person (Bartol & Srivastava, 2002:p65). And finally, we can say that the shared knowledge in an organization is related to the real amount of information a person shares with others (Bock & Kim, 2002; Lin & Lee, 2004). Knowledge sharing

is a new field of research that has helped researchers in conceptualizing sharing different knowledge types in organizations. We can attribute the weakness of epistemological concepts of this new field of study to its short history of contemplating and theorizing about effective factors that impact knowledge sharing. In addition to this weakness, one of the main goals of researching knowledge sharing is examining and identifying methods by which organizations can leverage personal knowledge of members throughout the entire organization (Li et al., 2006).

Foy (1999), claims that knowledge sharing is about facilitating the learning through sharing knowledge to achieve usable ideas, products and processes (Lindsey, 2006.p 500).

In Bartol & Srivastava (2002) view, knowledge sharing is about sharing information, ideas, suggestions and experiences with others.

Ipe (2003) believes that knowledge sharing is in essential, the activity of granting available knowledge to other members of an organization (Ipe, 2003b, p32) .Some researchers believe that during the knowledge sharing process, individuals exchange their knowledge (both objective and subjective) and produce a new knowledge. This process has two stages: knowledge presenting and knowledge reception (Van den Hoof & de Leeuw Van Weenen, 2004).

MC Nill (2003) defines knowledge sharing as individuals who discuss common experience and goals, exchange ideas and information (P.299). Others view knowledge sharing as a set of behaviors that requires information exchange or help others (Connelly & Kelloway, 2003, P. 294) .Reagans and MC Evily (2003), claim that the success of implicit knowledge exchange requires a real person with proper relation and locating in a suitable place.

Some consider knowledge sharing as a behavior through which an individual voluntarily provides access to knowledge and experience for other individuals within and outside the organization (Hansen & Avital, 2005, P. 6).

There is little empirical evidence about explaining and designing the knowledge sharing model in universities. However, we can point out to some studies such as (Yuen & Majid, 2007) about knowledge sharing among students, (Parrirokh et al, 2008) about university libraries and (Suhaimie et al., 2006) about the knowledge sharing culture in universities.

Therefore, this study specifically examines the knowledge sharing among faculty members of research institutes and universities of Iran and can have an important contribution.

Table1. Some samples of researches about knowledge sharing in academic settings

researcher	Objectives, method, population and country	Empirical findings
Howell & Annansingh (2012)	To examine knowledge sharing of creation in universities. Constructive approach and focus group. Two focus groups of two faculty members in two universities, in England	The results showed that organizational culture and cultural expectations play an essential role in higher education institutes' tendency to knowledge sharing and creation.
Zawawi et al (2011)	Exploring factors and obstacles of knowledge sharing behavior or among non-faculty staff of universities. The method is correlational descriptive and case study of 156 employees in Malaysia	There is a negative relationship between lack of self-efficacy (individual factor), lack of information and communication technology (technological factor and organizational rewards (organizational factor) as obstacles of practical knowledge sharing.
Xue et al (2011)	To examine the effect of team atmosphere and empowering leadership on individual's knowledge sharing behavior. The survey was used of 434 samples of students in US.	The results showed that team atmosphere and empowering leadership have a significant impact on students' knowledge sharing behavior through affecting their attitude.

Ma & Yuen (2011)	Studying motivational factors of online knowledge sharing. The method is a survey including 581 students in Hong Kong	The results showed that online received motivations and commitment has a positive and significant relationship with online knowledge sharing.
Sohail & Daud (2009)	Studying factors and obstacles of knowledge sharing among faculty members in public and private sector. A descriptive study including 161 faculty members, in Malaysia	The results showed that among different factors, the nature of knowledge and motivation has more effect. There was also little difference between public and private sector.
Chang et al (2009)	Studying the effect of individual, organizational and technological factors on knowledge sharing of faculty members. A survey of 60 faculty members in Malaysia	The results showed that reward systems and individual expectations have impact on knowledge sharing. But resorting to force faculty members to participate is not a suitable policy.
- Teh et al (2010)	Studying the relationship between internet self- efficacy, computer self- efficacy and cultural factors that affect knowledge sharing. A survey and significant of 135 Chinese students in Malaysia	Computer, offering a face knowledge has a positive relationship with knowledge sharing behavior and face to face knowledge reception has a negative and significant relationship with knowledge sharing behavior

RESEARCH METHOD

The main goal of this research is studying knowledge sharing among faculty members of research institutes in Iran. This study is an exploratory and qualitative research which leverages purposeful sampling of faculty members. First, a list of 30 eligible members was selected for the interview, from whom finally 18 person responded. After interview, the transcripts were sent to them to offer any suggestions or comments and also refer us to other faculty members with whom they share knowledge. The data gathering tool was in depth face to face interviews with open questions. Each interview was recorded and was analyzed carefully and after 14 interviews we reached to saturation. The data analysis was conducted based on open coding. To ensure validity the participants’ analysis and interpretation were used to analyze data.

DATA ANALYSIS AND RESULTS

Through data analysis we found that some factors influence knowledge sharing including: enjoying helping others, attitude toward sharing (internal and personal motivations), three motives for promotion in organization, the nature of being a faculty member, and the motivation for gaining financial benefits (external and organizational motivations). Furthermore, faculty members, as main actors of knowledge sharing, adopt some strategies such as personal interactions. Indeed interpersonal and intra-organizational context provides a special context for personal and within group interactions.

Table2. The results of open coding and correspondence between main categories and subcategories

Main categories	Sub categories
- Sharing actors	- Main actors (faculty members)
- knowledge sharing	- shadow actors (students)
1- personal-internal motivations	- within disciplinary knowledge sharing
2- external or organizational motivations	1.1 need to learn 1.2 joy of helping others 2.1 promotion 2.2 financial benefits
3- willingness to knowledge sharing among faculty members	3.1 leveraging other member’s experience 3.2 willingness to present current knowledge 3.3 willingness to interdisciplinary and disciplinary knowledge sharing 3.4 indirect knowledge sharing
4- personal interactions	4.1 informal networks formation for disciplinary knowledge sharing 4.2 informal networks formation for interdisciplinary knowledge

	sharing 4.3 personal interactions
5- inter-personal context	5.1 the sense of knowledge ownership 5.2 the faculty member's credit 5.3 inter-personal trust
6- within organization context	6.1 information technology 6.2 academic culture
7- attitude toward academic knowledge building	7.1 new knowledge building policies 7.2 intangible knowledge sharing policy making

DISCUSSION AND CONCLUSION

The outcome of qualitative analysis showed that the willingness of faculty members to indirect knowledge sharing with colleagues is the main phenomenon in academic settings. The experience of participants suggested that the main element is knowledge sharing with colleagues. This element was more important when participants in the research had a tendency to leverage the experience of other members and wanted to present the current knowledge and share interdisciplinary and disciplinary knowledge. The results also showed that personal and group interaction has outcomes such as increased learning, interdisciplinary and inter-generation dialogue and the maturity of knowledge creation. Results also showed that there are certain weaknesses in knowledge management. Need for learning is one of the main motivations for knowledge sharing among faculty members. To fulfill this need they believed that through knowledge sharing they acquire new knowledge. The promotion for higher levels is one of the external organizational motivations. Some considered it as their mission. Among subcategories we can mention the following strategies: informal networks formation for within disciplinary and interdisciplinary knowledge sharing, reinforcing shadow actors' (students) knowledge networks, common idea generation, personal interaction and indirect knowledge creation. The personal and organizational context also provides a specific context for personal and intergroup interaction with colleagues. They also sought for change in attitude toward knowledge building. We can claim that almost all participants considered learning as the most important outcome of personal and group interaction. Finally, they proposed to increase and promote cultural and sport activities to enhance interaction and facilitate knowledge sharing process.

REFERENCES

- Adhikari, D. R. (2010). Knowledge management in academic institutions. *International Journal of Educational Management*, 24 (2), 94-104.
- Alavi, M., & Leidner, D. (2001). Review: knowledge management and knowledge management systems: conceptual foundations and research issues. *MIS Quarterly*, 25(1), 107-136.
- Bartol, K. M., & Srivastava, A. (2002). Encouraging knowledge sharing: the role of organizational reward systems. *Journal of Leadership and Organization Studies*, 9(1), 64—76.
- Biloslavo, R & Trnavcevic, A. (2007). Knowledge Management Audit in a Higher Educational Institution: A Case Study, *Knowledge and Process Management*, 14 (4), 275–286.
- Blackman, D & Kennedy, M. (2009). Knowledge management and effective university governance. *Journal of knowledge management*. 13 (6), 547-563.
- Bock, G. W., & Kim, Y. (2002). Breaking the myths of rewards: an exploratory study of attitudes about knowledge sharing. *Information Resources Management Journal*, 15(2), 14—21.
- Cheng M.Y, Ho J, S. Y, and Lau P. M. (2009). Knowledge Sharing in Academic Institutions: a Study of Multimedia University Malaysia. *Electronic Journal of Knowledge Management*, 7(3), 313 - 324, available online at www.ejkm.com.
- Choo, C. W., & Bontis, N. (2002). The strategic management of intellectual capital and organizational knowledge. New York, Oxford University Press.
- Connelly, C. E., & Kelloway, E. K. (2003). Predictors of employees' perceptions of knowledge sharing cultures. *Leadership & Organization Development Journal*, 24(5/6), 294–301.
- Corbitt, B., Bradley, T. and Thanasankit, T. (2005). Factors influencing the implementation and use of a portal for knowledge management in higher education. Proceedings of the 9th Pacific Asia Conference on Information Systems, Bangkok.
- Coukos-semmel, E.D.(2002). Knowledge Management: Process and Strategies used in united state Research universities. Proquest Dissertation, UMI Number 3041780.
- Coukos-Semmel, E. (2002). Knowledge management: Processes and strategies used in United States research universities. Florida Atlantic University. ProQuest Dissertations and Theses, 318 p.
- Davenport, T. H., & De Long, D. W. (1998). Successful knowledge management projects. *Sloan Management Review*, 39(2), 43–58.
- Davenport, T., DeLong, D. and Beers, M. (1998). Successful Knowledge Management projects. *Sloan*

- Management Review*, 39(2),43-57.
- Davenport, T. H., &Prusak, L. (2000). Working knowledge: How organizations manage what they know .Boston, MA: Harvard Business School Press.
- Grover, V., & Davenport, T. H. (2001). General perspectives on knowledge management: fostering a research agenda. *Journal of Management Information Systems*, 18(1), 5—21.
- Hansen, S & Avital, M. (2005).Share and share alike: The social and technological influences on knowledge sharing behavior. *Sprouts*, 5(1), 1-19.
- Howell, K. E., &Annansingh, F. (2012 in press). Knowledge generation and sharing in UK universities: A tale of two cultures? *International Journal of Information Management*, <http://dx.doi.org/10.1016/j.ijinfomgt.2012.05.003>
- Ipe, M. (2003a). Knowledge Sharing in Organizations: A Conceptual Framework, *Human Resource Development Review*, 2(4), pp. 337-359.
- Ipe, M. (2003b). The praxis of knowledge sharing in organizations: A case study. University of Minnesota). ProQuest Dissertations and Theses, 258 p.
- Kidwell, J. J., Vander, K.M., & Johnson, S.L. (2000). Applying corporate knowledge management practices in higher education. *Educause Quarterly*, 4, 28-33.
- Lee, J.-H., & Kim, Y.-G. (2001). A stage model of organizational knowledge management: a latent content analysis, *Expert Systems with Applications*, 20(4), 299-311.
- Lee, J.-H., Kim, Y.-G., & Kim, M. -Y. (2006). Effects of managerial drivers and climate maturity on knowledge-management performance: Empirical validation. *Information Resources Management Journal*, 19(3), 48–60.
- Lee H., & Roth, G. L. (2009). A conceptual framework for examining knowledge management in higher education contexts. *New Horizons in Adult Education and Human Resource Development*, 23(4), 22-37. <http://education.fiu.edu/newhorizons>.
- Lee, J. (2001). The impact of knowledge sharing, organizational capability and partnership quality on IS outsourcing success. *Information & Management*, 38(5), 323—335.
- Lin, H., & Lee, G. (2004). Perceptions of senior managers toward knowledge-sharing behavior. *Management Decision*, 42(1), 108—125.
- Lindsey, L. K. (2006). Knowledge sharing barriers, in the encyclopedia of knowledge management(pp.500-506) Schwartz, G. D: Idea Grouping, UK.
- McCarthy, A. F. (2006). Knowledge management: Evaluating strategies and processes used in higher education. Nova Southeastern University. ProQuest Dissertations and Theses, 207 p.
- MacNeil, C. M. (2003). Line managers: facilitators of knowledge sharing in teams. *Employee Relations*, 25(3), 294—307.
- Ma, Will W. K. & Yuen, Allan H.K. (2011).Understanding online knowledge sharing: An interpersonal relationship perspective. *Computers & Education*, 56, (1), 210-219.
- Mamta, B., &Jayanthi, R. (2012). Enhancing the teaching-learning process: a knowledge management approach. *International Journal of Educational Management*, 26(3), 313-329.
- Martin, J. S., & Marion, R. (2005).Higher education leadership roles in knowledge processing, *The Learning Organization*, 12 (2), 140-151.
- Mulligan, D. R. (2001). Knowledge-sharing leadership: Sharing of knowledge in relation to leadership. Capella University. ProQuest Dissertations and Theses, 141 p.
- Parirokh, M; Daneshgar, F &Fattahi, R. (2008). Identifying knowledge-sharing requirements in academic libraries. *Library Review*, 57 (2), 107-122.
- Piccoli, G; Ahmad, R and Ives, B, (2001). Knowledge management in academia: A proposed framework, *Journal of Information Technology and Management*, 1, (4), 229–245
- Reagans, R., &McEvily, B. (2003). Network structure and knowledge transfer: The effects of cohesion and range. *Administrative Science Quarterly*, 48(2), 240-267.
- Rowley, J. (2000) .Is higher education ready for knowledge management? *International Journal of Educational Management*, 14(7), 325-332.
- Sohail, M, S &Daud, S. (2009). Knowledge sharing in higher education institutions: Perspectives from Malaysia, VINE: The journal of information and knowledge management systems, 39(2), 125-142.
- Suhaimee, s; Abu Bakar, A.Z & Alias, R. A. (2006). Knowledge Sharing Culture in Malaysian Public Institution of Higher Education: An Overview. Proceedings of the Postgraduate Annual Research Seminar .P 354-359.
- Teh PL, Ho JSY, Yong CC, Yew SY. (2010). Internet self-efficacy, computer self-efficacy and cultural factors on knowledge sharing behavior. *African Journal of Business Management*, 4(18), 4086-4095, 18 December, 2010. Available online at <http://www.academicjournals.org/AJBM>.
- Tikhomirova, N; Gritsenko, A &Pechenkin, A. (2008).University approach to knowledge management. *The Journal of information and knowledge management systems*. 38,(1), 16-21.

- Van den Hooff, B., & de Leeuw van Weenen, F. (2004). Committed to Share: Commitment and CMC Use as Antecedents of Knowledge Sharing. *Knowledge and Process Management*, 11 (1), 13–24.
- Xue, Y, Bradley, J & Liang, H. (2011). Team climate, empowering leadership, and knowledge sharing. *Journal of Knowledge Management*, 15 (2), 299 – 312.
- Yuen, T.J & Majid, M.S. (2007). Knowledge-sharing patterns of undergraduate students in Singapore. *Library Review*, 56 (6), 485-494.
- Zawawi, et al. (2011).The Study of Barrier Factors in Knowledge Sharing: A Case Study in Public University. *Management Science and Engineering*, 5, (1), 59-70