

Knowledge sharing behaviour influences: a case of Library and Information Science faculties in Iran¹

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ABSTRACT

The dynamism of a new economy requires information professionals to not only quickly create knowledge but also to acquire and apply knowledge through knowledge sharing. As such, determining factors that may influence knowledge sharing behaviour constitutes an important area of research. This paper aims to determine the factors that influence knowledge sharing amongst Library and Information Science (LIS) faculties, which in this context refers to attitude, intention and intrinsic motivation. Also, the paper identifies the effect of two demographic variables (type of institute and length of teaching experience) on knowledge sharing behaviour. Data were collected through survey questionnaire returned by 93 full-time LIS teaching staff in governmental and private universities (Islamic Azad universities) in Iran. Results showed that among demographic variables a significant difference was found between knowledge sharing behaviour of LIS educators with different teaching experiences (.027) but observed no significant difference between knowledge sharing behaviour of LIS faculties working in governmental universities and those working in Islamic Azad universities. The researchers also found a significant relationship (0.000) between attitude of educators toward knowledge sharing and their intention to share knowledge. Results showed that intention and intrinsic motivation influence knowledge sharing behaviour of the LIS educators sampled.

Keywords: Knowledge sharing behaviour; Knowledge sharing attitude; Knowledge sharing intention; Intrinsic motivation; Library and Information Science educators

INTRODUCTION

As more information and knowledge is created and exchanged, knowledge is increasingly becoming "the" resource, rather than "a" resource for wealth generation (Cheng, Ho and Lau 2009). In the "resource based" view, knowledge is considered to be the most strategically important resource. The effective management of this resource is consequently one of the most important challenges facing today's organisations (Van den Hoof and De Ridder 2004). Therefore, organisations can start to effectively manage this resource when they understand the concept of knowledge. Hence, due to the lack of

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theories on this subject (Willem 2003) and the intangible nature of knowledge (Jain et al. 2007) more research needs to be done on this important resource.

A number of organisations have adapted and applied formal knowledge management over the past decade as practitioners and academics have identified effective knowledge management as a crucial factor for success in higher education (Aulawi et al. 2009; Kim and Ju 2008). Within the overall knowledge management domain, a critical area that needs more attention is knowledge sharing. Effective knowledge management strategies must emphasise the role of knowledge sharing to achieve maximum results for academic institutions. Knowledge sharing is considered as the most important process in knowledge management and it seems necessary for academic institutions to do more research on it. As faculty members play an important role in higher education (doing research, publishing, teaching, providing consultation and conducting other professional activities) identifying factors influencing their knowledge sharing behaviour was considered in this study.

In this paper the knowledge sharing factors that are focused on include attitude, intention and intrinsic motivation. Also the role of types of institution and educators' length of teaching experiences on knowledge sharing behaviour are further analysed. This study positions the knowledge sharing behaviour in term of sharing knowledge in the areas of:

- a) teaching (which includes teaching materials, teaching methodology, experiences and knowledge);
- b) doing research (which includes collaborative books, collaborative articles, collaborative research projects and making colleagues aware of research needs); and
- c) conducting professional activities (includes educators' membership in professional associations, their membership in journal editorial committees and their participation in reviewing journals articles).

LITERATURE REVIEW

Research concerning the factors affecting knowledge sharing has identified a number of different variables, from "hard" issues such as technologies and tools (Van den Hoof and De Ridder 2004; Kim and Lee 2005; Chennamaneni 2006) to "soft" issues such as motivation (Ardichvili, Page and Wentling 2003; Hinds and Pfeiffer 2003; Cheng, Ho and Lau 2009; Taylor and Murthy 2009) and trust (Gao 2004; Aulawi et al. 2009; Choi, Kang and Lee 2008). This review presents the empirical literature that studied factors influencing knowledge sharing behaviour in organisations and academic institutions in general, and the literature which focused on attitude, intention and intrinsic motivation in particular.

Osterloh and Frey (2000) asserted that effective knowledge creation and transfer is closely related to motivation management. They analyzed various organisational and motivational devices with respect to their suitability to generate and transfer knowledge. In doing so, they noted that certain organisational forms have the capacity to crowd out intrinsic motivation and therefore are detrimental to the effective transfer of knowledge.

Lin and Lee (2004) investigated the applicability of the Theory of Planned Behaviour in explaining senior managers' intentions to encourage knowledge sharing. The analytical results demonstrated that the main determinants of actual company knowledge sharing behaviour were the encouraging intentions of senior managers. Additionally, senior managers' attitudes (correlation value=0.43), subjective norms (0.45) and perceived

behavioural control (0.22) were found to positively influence intentions to encourage knowledge sharing.

Bock, Kim and Lee (2005) examined factors that are believed to influence individuals' knowledge-sharing intentions. They employed the Theory of Reasoned Action and augment it with extrinsic motivators, social-psychological forces and organisational climate factor that are believed to influence individuals' knowledge sharing intentions. The researchers also found that the attitude towards knowledge sharing (correlation value= 0.232) and subjective norms (0.266) influence individual's intention to engage in knowledge sharing behaviour, along with organisational climate (0.142)

Wasko and Faraj (2005) examined why individuals in electronic networks of practice contribute knowledge to others, primarily strangers, when the contributor does not have any immediate benefits and free-riders are able to acquire the same knowledge as everyone else. The results of their study indicated that individuals contribute their knowledge when they believe that participation enhances the professional reputation, when they have necessary expertise to share and when they become part of the structural network. An interesting finding of this study was that individuals contribute regardless of expectations of reciprocity or high levels of commitment to the network.

By integrating a motivational perspective into the Theory of Reasoned Action, Lin (2007) examined the role of both extrinsic (expected organisational rewards and reciprocal benefits) and intrinsic (knowledge self-efficacy and enjoyment in helping others) motivators in explaining employee knowledge sharing intentions. The results showed that motivational factors such as reciprocal benefits (correlation value= 0.35), knowledge self-efficacy (0.27), and enjoyment in helping others (0.21) were significantly associated with employee knowledge sharing attitudes. Also the result confirmed that reciprocal benefits (correlation value= 0.25), knowledge self-efficacy (0.42), and enjoyment in helping others (0.24) positively influence employee knowledge sharing intentions. However, expected organisational rewards did not significantly influence employee attitudes and behaviour intentions regarding knowledge sharing.

Research on knowledge sharing in higher education institutions has been considered by some researchers. Lou, Yang and Shih (2007) studied the behaviour of instructors from information management departments with regard to knowledge sharing at technological universities. The influence of self-motivation and incentive mechanism on instructors' individual knowledge sharing and the obstacles encountered while knowledge sharing were investigated in this study. The results showed that information management instructors may encounter some barriers when sharing knowledge with others; they showed negative consensus on issues such as individual job security, academic promotion and intellectual property rights, making colleagues unwilling to share knowledge; the relationship among colleagues is very distant; and department heads do not take knowledge sharing seriously. Among the positive consensus items are: instructors agreed that the research workload is too heavy to share knowledge with others; and the university's information software that facilitate knowledge sharing is too old to use. In addition, the four aspects of knowledge sharing between instructors such as (a) the behaviour of instructors' knowledge sharing in teaching, research, educational and student counseling; (b) the motives of instructors' knowledge sharing; (c) the incentives of instructors' knowledge sharing; and (d) the situations of instructors' knowledge sharing were correlated with their demographic moderators which include gender, seniority of teaching, marital status, educational background, type of institute, institute location,

administrative duties and age. Also, the motives and behaviour of knowledge sharing are found to be significantly positively correlated, so that the higher the motives of knowledge sharing, the more that the behaviour of knowledge sharing occurs.

Kim and Ju (2008) identified and analyzed major factors (perception, trust, openness in communication, collaboration, reward systems and communication channel) for knowledge-sharing among faculty members in a higher educational institution in order to examine how those factors influence campus wide knowledge-sharing. The study also investigated the way in which those factors are interrelated. Results showed that perception is the most influential factor and reward systems are the second-most influential factor for faculty knowledge-sharing. Respondents did not consider other factors such as trust, openness in communication, collaboration, and communication channels based on IT infrastructure to be main factors. These factors did not show statistically significant effect on faculty knowledge-sharing.

Shin, Ramayah and Jahani (2008) tried to explain intention to share knowledge among academics by using Theory of Reasoned Action. The study was done in a governmental institution of higher learning and the target respondents were academics from the lowest rank of instructors to the professors. The results showed that there was a strong positive relationship between attitude towards knowledge sharing and the intention to share knowledge. This result was consistent with the previous works of others (Kim and Lee 1995; Bock, Kim and Lee 2005) who found that an individual's intention to share knowledge is driven primarily by attitude towards knowledge sharing. Attitude towards knowledge sharing is found to be positively and significant correlated to the intention to share knowledge.

RESEARCH QUESTIONS AND HYPOTHESES

This study sought to address the following research questions:

- a) Is there any significant difference between knowledge sharing behaviour of library and information science faculties working in governmental universities with those working in Islamic Azad Universities (IAU)²?
- b) Is there any significant difference between knowledge sharing behaviour of library and information science faculties with different teaching experience?

In this study three factors are considered as independent variables (attitude, intention and intrinsic motivation) and the researchers examine the effect of these variables on the dependent variable, that is the knowledge sharing behaviour of Library and Information Science (LIS) faculties. The relationship between attitude and intention of faculties to share knowledge, the relationship between intention and knowledge sharing behaviour, and the relationship between intrinsic motivation and knowledge sharing behaviour of faculties are examined. The variables and hypotheses are discussed and developed in the following sub-sections.

Attitude towards Knowledge Sharing Behaviour

In the Theory of Reasoned Action (TRA) and the Theory of Planned Behaviour (TPB), attitude factors have been tested and shown to be significant predictors of organisational

² A non—governmental type

behavioural intentions. For example, Chang (1998) argued that attitude towards moral behaviour significantly influences behavioural intentions. Moreover, Ryu, Ho and Han's (2003) study showed that physicians' attitudes towards knowledge sharing have affected knowledge sharing intentions. Bock, Kim and Lee (2005) have investigated the positive effect of attitudes toward knowledge sharing on individuals' intentions to share knowledge. Shin, Ramayah and Jahani (2008) showed that an absence of the attitude towards knowledge sharing can lead to selfishness, knowledge restraint and conflicts between universities. In this study, attitudes toward knowledge sharing refers to the positive or negative evaluations of LIS faculties regarding knowledge sharing behaviour. The researchers therefore formulate the following first hypothesis:

H1. There is a significant relationship between attitude of Library and Information Science faculties toward knowledge sharing and their intention to share.

Intention to Share Knowledge

Although the result of most surveys which used TPB to form their researchers' model showed that people's intention to share knowledge is affected by their attitude and subjective norms (Bock, Kim and Lee 2005; Shin, Ramayah and Jahani 2008), the research by Kankahali and Wei (2006) showed that people's intention to share knowledge is prior to their attitude towards knowledge sharing. According to some researchers (Bock and Kim 2002; Bock and Kim 2005; Andriessen 2006; Aulawi et al. 2009) when everything is ready for sharing knowledge in a situation, the willingness to share knowledge can support and reinforce people's attitude towards knowledge sharing. However, sometimes it may happen that people are willing to share knowledge due to the lack of facilities or the presence of condition that prevents them from doing so. Here it is predicted that faculties' intention to share knowledge leads to increasing knowledge sharing behaviour. The second hypothesis is put forward as follows:

H2. There is a significant relationship between Library and Information Science faculties' intention to share knowledge and their knowledge sharing behaviour.

Intrinsic Motivation for Sharing Knowledge

From an intrinsic motivational perspective, behaviour is evoked by the need of employees to feel competent and self-determined in dealing with their environment (Deci and Ryan 1987). Deci (1975) refers to intrinsic motivation as engaging in an activity for its own sake, out of interest, or for the pleasure and satisfaction derived from the experience. Research has recognized the crucial role of intrinsic motivators in explaining human behaviours in several domains (Vallerand, Deci and Ryan 2000), including knowledge sharing (Osterloh and Frey 2000). Some researchers consider reputation as a strong motivation to share knowledge (Wasko and Faraj 2005; Taylor and Murthy 2009) and some enjoyment in helping others (Lin 2007). According to Szulanski (1996) intrinsic motivation of the source is the most important factor in the process of transfer knowledge. Therefore, it has the aptitude to transmit the message and the desire to share it. This intrinsic motivation is especially important for the transfer of tacit knowledge. This study proposes enjoyment in helping others, obtaining achievement and success as well as reputation as three conditions, which form faculties' intrinsic motivation for knowledge sharing. The following third hypothesis is presented:

H3. Intrinsic motivation of Library and Information Science faculties will significantly affect their knowledge sharing behaviour.

Figure 1 presents the conceptual framework of the study.

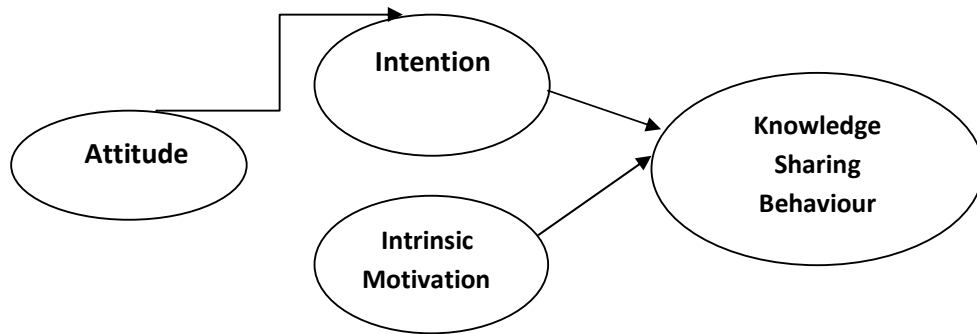


Figure 1: The Conceptual Framework

RESEARCH METHODOLOGY

The study sampled LIS faculty members working full-time in the universities affiliated to the Ministry of Science, Research and Technology (i.e. government universities) and Islamic Azad universities (IAU, i.e. private universities) in Iran. The limited number of LIS educators (120) in the mentioned universities has made the authors to use no special sampling techniques; therefore all LIS faculty members were considered as the research population. Employing survey as the data-gathering technique, a total of 120 questionnaires were mailed out to the LIS faculties from April to August 2010, addressed to their respective institutions. Out of these 120 questionnaires, 93 were returned, giving a response rate of 78.3%.

In this study the survey instrument is divided into three sections: section A includes questions eliciting educators' demographic characteristics (gender, level of education, academic rank, type of university and teaching experience); section B comprises three sub-sections consist of multiple choice questions to measure knowledge sharing behaviour of educators in teaching, research and professional activities; and section C includes items related to the research variables (attitude, intention and intrinsic motivation), using a five-point Likert scale (ranging from 1=strongly agree to 5= strongly disagree).

The instrument was initially circulated to 15 LIS faculty members in five different universities to determine the understandability of items included in the questionnaire, as well as to incorporate any useful suggestions that the LIS educators might offer. Improvement and modification including rephrasing and rewording were done based on the feedback obtained. Cronbach's alpha was used to measure the reliability of items in section C of the questionnaire. According to Sekaran (2003) alpha values greater than 0.70 are acceptable for basic research. The results of Cronbach's coefficient alpha are given in Table 1 which indicate that the items are acceptable.

Table 1: Reliability Analysis

Variables	Number of Items	Alpha
Attitude	6	0.82
Intention	5	0.91
Intrinsic Motivation	5	0.73

RESULTS

Demographic Information of Respondents

Based on the demographic information presented in Table 2, most of the respondents were male (58.1%). A total of 54.8% had a doctoral degree (54.8%), and the majority was tenured either as a lecturer (48.4%) or Assistant Professor (43.0%). Most faculty members were teaching in governmental universities (63.4%) and most of them had 5 to 10 years experience (29.0%).

Table 2: Respondents' Demographic Information

Variable	Classification	Frequency	Percentage
Gender	Male	54	58.1
	Female	39	41.9
Education	Masters degree	42	45.2
	Doctoral degree	51	54.8
Designation	Lecturer	45	48.4
	Assistant Professor	40	43.0
	Associate Professor	4	4.3
	Professor	4	4.3
Type of Institution	Governmental university	59	63.4
	Islamic Azad university	32	34.4
Teaching Experience (in years)	More than 20	14	15.1
	16 – 20	17	18.3
	11 – 15	16	17.2
	5 – 10	27	29.0
	Less than 5	19	20.4

Type of Institutions and Knowledge Sharing Behaviour

The first research question in this study relates to the influence of type of institutions on knowledge sharing behaviour. In fact the researchers wanted to know if there is a significant difference between knowledge sharing behaviour of faculty members working in governmental universities with those working in IAU. An independent sample t-test was used to analyse the results. Table 3 shows that the mean values of knowledge sharing behaviour of faculty members working in the two types of universities are almost near and the t-test (Table 4) confirms this equality as it is clear that p-value (0.687) is greater than 0.05. The answer to the first research question is negative, indicating that there is no significant difference between knowledge sharing behaviour of faculty members working in governmental universities with those working in IAU.

Table 3: Group Statistics

	Type of university	N	Mean	Std. Deviation	Std. Error Mean
Knowledge sharing behaviour	Government universities	59	2.0236	.80190	.10440
	Islamic Azad University	32	2.0960	.84598	.14955

Table 4: Independent Sample T-test

		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Sig. (2-tailed)
Knowledge sharing behaviour	Equal variances assumed	.159	.691	-.404	89	.687
	Equal variances not assumed			-.397	60.852	.693

Teaching Members’ Teaching Experiences and Knowledge Sharing Behaviour

The second research question explored the influence of faculty members' teaching experience on knowledge sharing behaviour. A one-way ANOVA was used for this purpose. Result in Table 5 shows that there is a significant difference between knowledge sharing behaviour of faculty members with different teaching experience (p-value 0.027>0.05).

Table 5: ANOVA Analysis

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	6.910	4	1.727	2.876	.027
Within Groups	52.849	88	.601		
Total	59.759	92			

Using Duncan's range test has helped to show that the group of faculty members with specific experience indicated higher knowledge sharing behaviour. No significant difference was observed within groups but significant difference was indicated between groups with regard to knowledge sharing (Table 6). The results show that faculty members with more than 20 years experience and those with less than 5 years experience (group 2) reflect higher degree of knowledge sharing behaviour.

Table 6: Duncan's Range Test

Teaching experience (in years)	N	Subset for alpha = .05	
		1	2
16-20	17	1.7893	
5-10	27	1.8826	
11-15	16	1.8858	
More than 20	14		2.3168
Less than 5	19		2.4836
Sig.		.067	.524

Hypotheses Analysis

Item analysis with a median of 2.5 was used to explore the degree of consensus on the items of each variable (attitude, intention and intrinsic motivation). Review of the item statements related to the attitude of educators show that in general most LIS faculty members have a positive attitude towards knowledge sharing (Table 7); all respondents expressed their agreement that sharing knowledge can result in professional development and better performance in their job; almost 97% believed that sharing knowledge and experience leads to learning new knowledge and knowledge production. On the other hand, almost one-third of faculty members (29.4%) showed their agreement with the item statement that sharing knowledge and transferring experience provides a condition of misusing. This may be due to the lack of trust that LIS educators might have towards their colleagues in which the latter might be misusing their knowledge, or because of lack of trust in validity and accuracy of their colleague's knowledge.

Table 7: Item Analysis of Faculty Members' Attitude towards Knowledge Sharing (N=93)

Aspect	Item statement	Frequency & percentage					Mean
		Strongly agree	Agree	Neutral	Disagree	Strongly disagree	
Attitude towards knowledge sharing	Sharing know ledge in teaching and research is followed with professional development and better performing	63 (67.7%)	30 (32.3%)	—	—	—	3.19
	Sharing knowledge and experience leads to learning new knowledge and knowledge production	53 (57%)	37 (39.8%)	2 (2.2%)	—	—	
	Sharing teaching materials with colleagues saves time	46 (49.5%)	40 (43%)	6 (6.5%)	1 (1.1%)	—	
	Sharing knowledge and transferring experience provides a condition of misusing for colleagues	6 (6.5%)	21 (22.6%)	26 (28.0%)	29 (31.2%)	8 (8.6%)	
	I know the importance of sharing know ledge in teaching and research	42 (45.2%)	42 (45.2%)	6 (6.5%)	—	—	
	In my opinion sharing knowledge has no effect on generating new ideas	5 (5.4%)	6 (6.5%)	5 (5.4%)	40 (43.0%)	32 (34.4%)	

In terms of the intention to share knowledge (Table 8), LIS faculty members showed high consensus of agreement on the statement “I am willing to share knowledge and experience which I acquired in teaching, research and professional activities” (95.7%) and “When my colleagues face a problem I try to help them as much as I can” (97.9%). Also, about 80% of them disagreed with the statement, “When I take part in meetings and seminars, I don’t consider it necessary to tell my colleague about the results”. In general, the results showed that most faculty members in this study had the intention to share knowledge with their colleagues.

A high majority of LIS faculty members agree on the intrinsic motivation for sharing knowledge, particularly the statements, “I am willing to share knowledge because I believe its outcome is achievement and success” (95.7%) and “I am willing to share knowledge because I enjoy helping others” (90.4%). Also almost 85% of educators like to share knowledge for the sake of solving colleagues' problems. On the other hand, the two item statements that obtained the lowest agreement consensus were, “I am willing to share

knowledge because I can obtain reputation” (50.6%) and “I am willing to share knowledge as it makes my colleagues know more about my skills”(58.0%). The results presented in Table 9 indicate that intrinsic motivation such as helping colleagues was the most important reason that motivates faculty members to share knowledge, and sharing knowledge to obtain reputation was the least important reason chosen.

Table 8: Item Analysis of Faculty Members’ Intention to Share Knowledge (N=93)

Aspect	Item statement	Frequency & percentage					Mean
		Strongly agree	Agree	Neutral	Disagree	Strongly disagree	
Intention to share knowledge	I am willing to share knowledge and experience which I acquired in teaching, research and professional activities	47 (50.5%)	42 (45.2%)	4 (4.3%)	—	—	3.24
	I try to participate in discussion groups and workshops to share knowledge	30 (32.3%)	50 (53.8%)	9 (9.7%)	3 (3.2%)	—	
	When my colleagues face a problem, I try to help them as much as I can.	57 (61.3%)	34 (36.6%)	1 (1.1%)	—	—	
	When I take part in meetings and seminars, I don't consider it necessary to tell my colleagues about the results	1 (1.1%)	5 (5.4%)	13 (14%)	46 (49.5%)	28 (30.1%)	
	I am willing to share my notes, teaching files and research outcomes with colleagues	23 (24.7%)	49 (52.7%)	16 (17.2%)	5 (5.4%)	—	

Table 9: Item Analysis of Faculty Members’ Intrinsic Motivation for Knowledge Sharing (N=93)

Aspect	Item statement	Frequency & percentage					Mean
		Strongly agree	Agree	Neutral	Disagree	Strongly disagree	
Intrinsic motivation to share knowledge	I am willing to share knowledge because I can obtain reputation	17 (18.3%)	30 (32.3%)	31 (33.3%)	14 (15.1%)	1 (1.1%)	3.02
	I am willing to share knowledge because I enjoy helping others	38 (40.9%)	46 (49.5%)	9 (9.7%)	—	—	
	I am willing to share knowledge as it makes my colleagues know more about my skills	15 (16.1%)	39 (41.9%)	25 (26.9%)	14 (15.1%)	—	
	I am willing to share knowledge to solve my colleagues’ problems	29 (31.2%)	51 (54.8%)	11 (11.8%)	1 (1.1%)	—	
	I am willing to share knowledge because I believe its outcome is achievement and success.	55 (59.1%)	34 (36.6%)	3 (3.2%)	1 (1.1%)	—	

Correlation Analysis

Pearson correlation coefficient was used to explore the correlation between (a) attitude and intention to share knowledge (Hypothesis 1), (b) intention and knowledge sharing behaviour (Hypothesis 2), and (c) correlation between intrinsic motivation and knowledge sharing behaviour (Hypothesis 3).

The results of hypotheses testing are reported in Table 10, which shows that all three hypotheses were significantly supported. As hypothesized, attitude is significantly associated with intention to share knowledge; intention is significantly associated with knowledge sharing behaviour; and similarly intrinsic motivation is significantly associated with knowledge sharing behaviour (for all hypotheses p-value obtained $0.000 > 0.05$) and therefore hypotheses H1, H2 and H3 are supported.

Table 10: Results of Correlation Analysis (N=93)

Hypotheses	Significance	Correlation Value	Results of Hypotheses Test
H1: There is a significant relationship between Library and information science faculties' attitude toward knowledge sharing and their intention to share knowledge	0.000	0.526	Supported
H2: There is a significant relationship between Library and information science faculties' intention to share knowledge and their knowledge sharing behaviour	0.000	0.637	Supported
H3: There is a significant relationship between Library and information science faculties' intrinsic motivation for sharing knowledge and their knowledge sharing behaviour	0.000	0.603	Supported

p-value < 0.05

DISCUSSION

This study examining the effect of attitude on the intention of LIS faculties to share knowledge obtains similar findings as those conducted by Lin and Lee (2004), Bock, Kim and Lee (2005) and Shin, Ramayah and Jahani (2008). The results show that there is a significant relationship between attitude of faculties and their intention to share knowledge. It means that faculty with the strongest intention to encourage knowledge sharing also has more positive attitudes towards knowledge sharing behaviour.

The findings also indicate that faculties' intention to share knowledge is significantly associated with their knowledge sharing behaviour. The result accords with Lin and Lee's (2004) research. Using the applicability of Theory of Planned Behaviour, their findings showed that intention (correlation value = 0.49) influences knowledge sharing behaviour of senior managers.

This study confirms that intrinsic motivation is significantly associated with knowledge sharing behaviour of faculty. The LIS academics share knowledge to mostly achieve success , promote their achievement , solve their colleagues' problems and help them, not for the sake of reputation. Thus finding is consistent with Taylor and Murthy's (2009) research, who found that altruism is a significant predictor (p-value= 0.021) in sharing knowledge among accounting academics but not reputation (p-value= 0.213).

In identifying the influence of type of institutions on faculty's knowledge sharing behaviour, the researchers found no significant relationship between knowledge sharing behaviour of faculties working in governmental universities and those in private universities. On the other hand, results show that there is a significant relationship between faculties' teaching experience and their knowledge sharing behaviour – faculties with less than five years' experience and more than 20 years' experience showed higher degree of knowledge sharing behaviour. This is different with what Lou, Yang and Shih (2007) found in their research. Their findings revealed that instructors at public colleges and universities tended to be more willing to share knowledge compared to instructors at private colleges and universities. Furthermore, instructors with a seniority of 5 to 10 years tended to be more willing to share knowledge than instructors with less than 5 years teaching experience. However, Lou, Yang and Shih (2007) found that instructors with fewer than 5 years experience tended to be more willing to share knowledge than their senior counterparts of over 10 years experience.

This study is limited to the influence of three individual factors (attitude, intention and intrinsic motivation) and two demographic variables (teaching experience and type of institution) on knowledge sharing behaviour, as such further research may be conducted to determine other factors such as trust, communication and collaboration on knowledge sharing behaviour of the faculty members. Although the study found the effect of intention and intrinsic motivation as significant variables on knowledge sharing behaviour, the mean value obtained for knowledge sharing behaviour of the LIS academics is low (2.05). The study may be extended to examine what factors motivate faculties and enforce their intention to share knowledge. On the whole, based on the findings of the research, what universities administrators and management should consider is to create a facilitative work environment for knowledge sharing so that knowledge sharing becomes a second nature among academics.

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REFERENCES

- Andriessen, E.J.H. 2006. *To share or not share, that is the question: conditions for the willingness to share knowledge*. Delft Innovation System Papers, Research Programme Innovation Systems, Faculty of Technology, Policy and Management, Delft University of Technology, Delft, The Netherlands
- Ardichvili, A., Page, V. and Wentling, T. 2003. Motivation and barriers to participation in virtual knowledge-sharing communities of practice. *Journal of Knowledge Management*, Vol. 7, no.1: 64-77.
- Aulawi, H. et al. 2009. Knowledge sharing behaviour, antecedent and their impact on the individual innovation capability, *Journal of Applied Sciences Research*, Vol. 5, No. 12: 2238-2245.

- Bock, G.W. and Kim, Y.G. 2002. Determinants of the individual's knowledge sharing behaviour: the theory of reasoned action perspective. Proceedings of the *Pacific-Asia Conference on Information System (PACIS)*, Meiji University, Tokyo, Japan, 2-4 September 2002: 1008-1023.
- Bock, G.W., Kim, Y.G. and Lee, J.N. 2005. Behavioural intention formation in knowledge sharing: examining the roles of extrinsic motivators, social-psychological forces, and organizational climate. *MIS Quarterly*, Vol. 29, no. 1: 87-111.
- Chang, M.K. 1998. Predicting unethical behaviour: a comparison of the theory of reasoned action and the theory of planned behaviour. *Journal of Business Ethics*, Vol. 17, no. 6: 1825-1834.
- Chennamaneni, A. 2006. *Determinants of knowledge sharing behaviour: developing & testing an integrated theoretical model*. Ph.D Thesis. Faculty of Graduate School, University of Texas.
- 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*, Vol. 7, no 3: 313-324. Available at www.ejkm.com
- Choi, S. Y., Young, S. and Lee, H. 2008. The effects of socio-technical enablers on knowledge sharing : an exploratory examination. *Journal of Information Science*, Vol. 34, no. 5 : 742-754.
- Deci, E.L. 1975. *Intrinsic motivation*. Plenum Press, New York.
- Deci, E.L and Ryan, R.M, 1987. The support of autonomy and the control of behaviour. *Journal of Personality and Social Psychology*, Vol. 53, no 6: 1024-37.
- Gao, S. 2004. *Understanding Knowledge Sharing Behaviour*. Masters Dissertation. The Hong Kong University of Science & Technology. Available at: http://lbxml.ust.hk/th_imgo/b834876.pdf
- Hinds, P.J. and Pfeffer, J. 2003. Why organizations don't know what they know: cognitive and motivational factors affecting the transfer of expertise, in Achkerman, M, Pipek, V and Wulf, (Eds), *Sharing Expertise: Beyond knowledge management*, The MIT Press, Cambridge, MA.
- Jain, K., Singh, K.I, Sandhu, M., Sidhu, K. and Gurvinder. 2006. *Knowledge Sharing Among Academic Staff: A Case Study of Business Schools in Klang Valley, Malaysia*, Available at: www.ucsi.edu.my/jasa/2/papers/08A.pdf
- Kankanhalli, A., Tan, B.C.Y. and Wei, K.K. 2006. Knowledge producers and consumers , In Schwartz, D.J., Ed, *Encyclopedia of Knowledge Management*, Hershey, PA: Idea Group Reference, Pennsylvania: 459-466.
- Kim, S.H. and Ju, B. 2008. An analysis of faculty perceptions: attitudes toward knowledge sharing and collaboration in an academic Institution. *Library and Information Science Research*, Vol. 30.
- Kim, Y. B. and Lee, B. H. 1995. R & D project team climate and team performance in Korea. *R & D Management*, Vol. 25, no. 2 : 179-196.
- Kim, S.H. and Lee, H. 2005. Employee knowledge sharing capabilities in public & private organizations: does organizational context matter? *Proceedings of the 38th Annual Hawaii International Conference on System Sciences*, IEEE, Hawaii, USA, 3-6 January, 2005: 1-10 Available at: <http://csdl2.computer.org/comp/proceedings/hicss/2005/2268/08/22680249a.pdf>
- Lin, H.F. 2007. Effects of extrinsic and intrinsic motivation on employee knowledge sharing intentions, *Journal of Information Science*, Vol.33, no. 2: 135-149.
- Lin, H. F. and Lee, G.G. 2004. Perceptions of senior managers toward knowledge sharing behaviour. *Journal of Management Decision*, Vol. 42, no. 1: 108-125.

- Lou, S.J., Yang, Y. S., Shih, R.C. 2007. A study on the knowledge sharing behaviour of information management instructors at technological universities in Taiwan, *World Transactions on Engineering and Technology Education*, Vol.6, no.1 :143-149
- Osterloh, M. and Frey, B. 2000. Motivation, knowledge transfer, and organizational forms, *Organization Science*, Vol.11, no. 5: 538-50.
- Ryu, S., Ho, S.H., and Han, I. 2003. *Knowledge sharing behaviour of physicians in hospitals*, Available at: www.afis.kaist.ac.kr.
- Sekaran, U. 2000. *Research methods for business: a skill-building approach*. New York: John Wiley and Sons. Inc: 308-313.
- Shin, C. H., Ramayah, T. and Jahani, S.2008. Using Theory of Reasoned Action to explain intention to share knowledge among academics. Available at: www.apera.nie.edu.sg/activities/.../APERA08_Day_3_Programme.pdf
- Szulanski, G. 1996. Exploring internal stickiness: impediments to the transfer of best practice within the firm, *Strategic Management Journal*, Vol. 17, no. 10: 27-43.
- Taylor, E.Z. and Murthy, U.S. 2009. Knowledge sharing among accounting academics in an electronic network of practice , *Accounting Horizons*, Vol. 23, no. 2: 151-179.
- Vallerand, R.J., Deci, E.C. and Ryan, R.M. 2000. Self-determination theory: a view from the hierarchical model of intrinsic and extrinsic motivation. *Psychological Inquiry*, Vol.11, no.4: 312–318.
- Van den Hoof, B. and De Ridder, J. A. 2004. Knowledge sharing in context: the influence of organizational commitment, communication climate & CMC use on knowledge sharing. *Journal of Knowledge Management*, Vol. 8, no. 6:117-130.
- Wasko , M.M. and Faraj, S. 2005. Why should I share? Examining social capital and knowledge contribution in electronic networks of practice. *MIS Quarterly*, Vol.29, no.1: 35–57.
- Willem, A. 2003.The role of organization specific integration mechanisms in Inter-Unit knowledge sharing, PhD dissertation. Vlerick Leuven Gent Management School, Ghent University, Belgium. Available at: http://72.14.203.104/serach?q=cache:AwAf_oklx7UJ:www.ofenhandwerk.com/oklc/pdf