

SOCIAL SCIENCES & HUMANITIES

Journal homepage: http://www.pertanika.upm.edu.my/

Motivational Factors for Academicians in Private Universities to Participate in Knowledge-Sharing Activities

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ABSTRACT

Everybody can be part of knowledge-sharing activities, and this is especially true if we are referring to Higher Education Institutions (HEIs), where, in many situations, knowledge sharing can be seen to take place via natural activities. However, barriers and problems for knowledge sharing are also common. This is because some people think that their knowledge is valuable and important and are unwilling to share unless there are enough incentives. This study applies the Theory of Planned Behaviour (TPB) to explain knowledge-sharing behaviour among academic staff at selected private HEIs in Malaysia. The main objective of this study is to identify the motivation that influences knowledge-sharing behaviour. A total of 110 respondents participated in answering this study's questionnaire. The findings revealed that knowledge-sharing behaviour among academic staff exists and is affected by different motivational factors such as organisational rewards and reciprocal benefit as extrinsic factors and self efficacy and enjoyment in helping other as intrinsic factors.

Keywords: Knowledge sharing, Motivational factors, Private universities in Malaysia

INTRODUCTION

Promoting knowledge sharing in any organisation is very important. As Dyer

ARTICLE INFO

Article history:

Received: 17 August 2014 Accepted: 3 December 2014

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and Nobeoka (2000) indicated, knowledge sharing can help communities of people to work together, and, by working together, these people can facilitate the exchange of knowledge, enhance organisational learning and increase their ability to achieve both individual and organizational goals. Knowledge sharing can be as simple as communication between two individuals or within a group of people,

and it can involve a practice of seeking and sharing knowledge. This suggests that knowledge sharing can occur at individual, group and organizational levels. At the organisational level, knowledge sharing captures, organises, reuses and transfers experienced-based knowledge that resides within the organisation and has the potential to be used by others. In this situation, the organisation has the potential to increase both the productivity and the retention of intellectual capital, even after employees have left the organisation (Lin, 2007).

Knowledge sharing is vital to the success knowledge management practices in all organisations, including HEIs. According to Kamal et al. (2007), the sharing of knowledge is essential in knowledge-based organisations like HEIs because most of the employees are knowledge workers. Davenport (2005) defines knowledge workers as workers who have high degrees of expertise, education or experience, whose primary job purpose involves creation, distribution or application of knowledge. The implicit knowledge created by academics is embedded in their minds and constitutes the storehouse of an educational institution's intellectual capital. Thus, it is believed that the knowledge residing in academicians is very important and needs to be managed and accessible. As stated by Yang and Ismail (2006), academicians in HEIs are no longer just providing knowledge to the students; they also must be able to manage and blend together their existing knowledge into references for the next generation.

The purpose of this study is to identify the motivational factors influencing the knowledge-sharing activities among academic staff in private HEIs in Malaysia.

KNOWLEDGE SHARING

According to the knowledge-based view of the firm (Grant, 1991, 1996; Spender, 1996), knowledge is the foundation of a firm's competitive advantage and, ultimately, the primary driver of the firm's value. This knowledge, however, resides within individuals (Nonaka & Konno, 1998) or, specifically, within the employees who create, archive, share, transfer and apply it while performing their jobs. Consequently, when there is movement between knowledge or information across individuals, knowledge sharing (KS) will take place.

KS is normally aimed accomplishing something useful with knowledge. The process for KS can be seen in two dimensions: one dimension manages existing knowledge, including the development of knowledge repositories (e.g., memos, reports, articles and reports) and knowledge compilations, the other manages knowledge-specific activities (i.e., knowledge acquisitions, creation. distribution. communication. sharing and application) (Stenmark, 2001).

Fengjie *et al.* (2004) noted that the process of KS normally involves, first, one person contributing a portion of his knowledge so that others can learn or get to know the knowledge, then, all members adding their own understandings and

transforming the knowledge into their own individual knowledge. In this process, the willingness of two or more parties to share their knowledge is required.

KS is important in building knowledge-based competitive advantages within any organisation (Cohen & Levinthal, 1990; Kogut & Zander, 1992). This is based on the notion that knowledge, when residing within an individual, needs to be shared or transferred before it can be reproduced to add value to the receivers of the knowledge.

Even though KS among individuals has been acknowledged as a positive force for the survival of an organisation, the factors that encourage or discourage KS behaviours in the organizational context are poorly understood. Therefore, it is not surprising that individuals are unwilling to share their knowledge with others. It is important to understand when people are willing to share their knowledge and how an organisation can facilitate this type of behaviour from both a research and a practical standpoint. Individuals are not always willing to share their knowledge, and they may not be willing to share as much as an organisation would like them to. In an academic institution, there are groups of experts and knowledge workers comprising of academic staff members who possess tacit knowledge through experience in their respective fields; therefore, it is an excellent place for practicing a knowledge management system.

Factors Contributing to Willingness to Share Knowledge

Many previous studies have used the theory of planned behaviour (TPB) to support research in KS; this is because KS is an intentional behaviour, this study also uses the TPB, in which intentions "are assumed to capture the motivational factors that influence a behavior" (Ajzen, 1991, p. 181). Three factors influence intentions include: (1) attitude toward the behaviour, (2) social norms regarding the behaviour, and (3) beliefs about one's control over the behaviour. Attitude refers to the degree to which one evaluates the behaviour favourably or unfavourably.

Previous studies also suggest that the level of KS can be influenced by several factors. As noted by Davenport and Prusak (1998), extensive KS within organisations is guarded by human tendencies or behaviours. Further, Hoof and Ridder (2004) stated that people would be more willing to share if they were assured that their contributions would be valued, that they would receive recognition and that the knowledge that they shared would be used.

The behaviour of sharing can be influenced by motivational factors. The ease of sharing is also likely to influence people's willingness to share. For example, Gagné (2009) stated that the nature of the knowledge will influence how easily it can be transferred, and its value will influence people's motivations to share. Motivation has been acknowledged as a key determinant of general behaviour. Extrinsic motivation and intrinsic motivation

influence people's attitude and willingness to share knowledge (Lin, 2007). Extrinsic motivation includes personal obligations to reciprocate. Thus far, researchers have studied KS motivation as a function of reciprocity issues, and of the relationship with the recipient and of rewards (Ipe, 2003).

In a study by Susantri and Wood (2011), it was noted that employees have to be encouraged to increase their involvement in KS activity. According to the authors, employees' attitudes and willingness to participate in KS activities are highly dependent upon their assumptions or expectations regarding the profit or loss that will result from their contributions (i.e., the extrinsic value of motivation). Further, in reference to educational psychology perspectives and, specifically, the motivational theories of learning, it is also stated that motivation and willingness to perform any action can be based on an individual's needs, desires and wants (i.e., intrinsic value of motivation). An example of this could be people sharing knowledge in online communities to gain opportunities to help others (Wasko & Faraj, 2005).

Previous studies have also indicated that KS is not free from barriers. As stated by Riege (2005), there are three levels of barriers that can potentially hinder KS. At the individual level, there are barriers such as a lack of communication skills and social networks, differences in national culture, differences in position status, and lack of time and trust. At the organisational level,

barriers include a lack of infrastructure or support environments. At the technological level, barriers are correlated with people's unwillingness to use applications and systems (Riege, 2005).

Thus, this paper's research objective is to examine the role of extrinsic (i.e., expected organisational rewards and reciprocal benefits) and intrinsic (i.e., knowledge self-efficacy and enjoyment in helping others) motivators in explaining lecturers' KS behaviours.

RESEARCH METHODOLOGY

Knowledge is important to both public and private learning institutions, especially when a country seeks to promote a knowledge-based economy. According to a study by Sohail and Daud (2009), the nature of knowledge, working cultures, staff's attitudes, motivations to share and opportunities to share play important roles in enhancing KS among teaching staff in public universities. This research was conducted among academic staff within private universities. In general, it can be said that people within universities do participate in KS activities. However, some earlier research suggested that different cultures of public and private universities impact the enhancement of KS activities. As Tippin (2003) stated, academics involvement in the KS activities could be quite inconsistent due to many of them becoming more individualistic and KS also depend on the university culture. Based on this reason, the study was proposed to see what would be the motivational factors that influence academics within private HEIs in participating with KS activities.

Further, Fullwood *et al.* (2013) noted from their study that universities always have cultures that are regarded as "collegially networked institutions", in which academic departments are idiosyncratic and complex and each department is related to different motives and objectives. Similarly, Taylor (2006) characterised universities as involving too much bureaucracy and being centralised institutions, traditionally run by and for academic communities, with less autonomy.

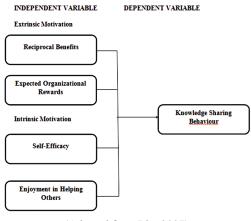
Several other organisational dimensions such as organisation structure, organisational culture and reward systems (Liebowitz & Beckman, 1998) have also been mentioned as impacting and enabling KS. As stated by Collision and Cook (2003), the organizational structures of universities or HEIs could also create barriers for KS, since academics generally have strong potentials to work individually and in isolation from each other.

The respondents within this research study were lecturers from the top four private universities, based on various levels of academics, faculties, working positions and years of service. The study was done to identify the motivating factors contributing to the involvement of academicians in public universities in KS activities. The study also determined the factors (i.e., intrinsic or extrinsic) contributing more to promoting these lecturers' willingness to share

The selection of the top four private universities in Malaysia was based on the survey of Malaysian University Rankings by QS Asian University in 2013. The respondent universities were: the Malaysia Multimedia University (MMU), Cyberjaya Campus; the University Tenaga Nasional (UNITEN), Putrajaya Campus; the Lim Kok Wing Creative Technology; and Universiti Tunku Abdul Rahman (UTAR). These universities were selected based on the idea that different universities would generate a more realistic overview of how the leading private universities in Malaysia applied KS in their institutions. A total of 300 questionnaires were distributed to lecturers through online forms and personal visits.

In order to support the current study, a conceptual framework was developed using Lin's (2007) conceptual model. The framework, however, was modified to suit the current study (see Fig.1).

CONCEPTUAL FRAMEWORK



(Adapted from Lin, 2007) Fig.1: Conceptual Framework

HYPOTHESIS AND RESEARCH MEASUREMENT

Previous research agrees that every individual is intrinsically motivated to share knowledge if he or she believes it is meaningful or interesting with regard to helping others solve exigent problems; this motivation exists in addition to individuals' natural love and enjoyment in helping others (Davenport & Prusak, 1998; Kankanhalli et al., 2005; Lin, 2007; Lin et al., 2008; Olatokun & Nwafor, 2012; Wasko & Faraj, 2005). Specifically, researchers like Bock et al. (2005), Ipe (2003), Kankanhalli et al. (2005), Lin (2007), Lin et al. (2008), Wasko and Faraj (2005) and Olatokun and Nwafor (2012) have stated that reciprocity behaviour is one of the motivational factors that can facilitate KS. Reciprocity behaviour entails a sense of communal indebtedness, through which employees are motivated to transfer personal knowledge if they foresee the extrinsic benefits associated with the information dissemination. Thus. research has suggested its first hypothesis as: H1: Reciprocal benefits have a positive

In their study, Susantri and Wood (2011) indicated that employees need to be encouraged to increase their participation in knowledge sharing activity based on the assumption that they will normally consider what they may gain or lose as a result of this action. Earlier Bock and Kim suggested that in general, people would be willing to involve in KS if they could expect to gain economic benefits such as increased pay, bonuses, job security, or

relationship with KS behaviour.

career advancement. Thus, this research suggested that:

H2: Expected organisational rewards have a positive relationship with KS behaviour.

Bock et al. (2005), Kankanhalli et al. (2005), Wasko and Faraj (2005) and Olatokun and Nwafor (2012) also suggested that self-efficacy could intrinsically motivate and encourage employees to share knowledge at their workplaces. Knowledge self-efficacy refers to individuals' discernment of their own ability to provide knowledge to others en route to the execution of a given task at a designated degree of performance. Individuals who feel confident that their knowledge is significant for organisational performance have a propensity to discharge their intellectual propriety to others, as well as to be actively involved in acquiring new knowledge for future sharing and application. Thus, based on these insights, this research study proposes its third hypothesis, i.e.:

H3: Self-efficacy has a positive relationship with KS behaviour.

In another situation, KS can be motivated by the feeling of enjoying to help others. Earlier research supports that some people can be motivated to contribute their knowledge as they knew they will help other people solve problems (Wasko & Faraj, 2005). Based on this, the research has suggested the following hypothesis:

H4: Enjoyment in helping others has a positive relationship with KS behaviour.

In their study, Susantri and Wood (2011) found that intrinsic motivation as well as extrinsic motivation influence

knowledge sharing attitude. However, they also found that intrinsic motivation plays a bigger role on the willingness to share compared to extrinsic motivation in which they said that intrinsic motivation is able to influence the willingness and eagerness to share. Thus, the research also proposed that: H5: Intrinsic motivation affects KS behaviour more than Extrinsic motivational factors.

Overall, the questionnaire for this research includes 57 items, which are divided into six sections. Section A (Demographic Data) was designed to collect the demographic data of the respondents. Section B (Expected Organisational Rewards) asked the respondents' opinions regarding their expectations of monetary and non-monetary rewards offered by the organisation for KS activities. These questions were adopted from Kankahalli et al. (2005) and Olatokun and Nwafor (2012). Section C (Reciprocal Benefits) sought the opinions of the respondents regarding their expectations of reciprocal benefits. These questions were adopted and modified from Kankahalli et al. (2005) and Olatokun and Nwafor (2012). Section D (Knowledge Self-Efficacy) sought to identify the respondents' opinions regarding the value they placed on the knowledge they shared. The questions were adopted and modified from Kankahalli et al. (2005) and Olatokun and Nwafor (2012). Section E (Enjoyment in Helping Others) collected data on the respondents' opinions regarding whether sharing knowledge is tied to the pleasure of helping people solve problems. These questions were adopted and modified from Kankahalli et al. (2005) and Olatokun and Nwafor (2012). Section F (Behaviour Towards KS) asked questions directed respondents' towards the behaviour towards KS.

All the questions in Sections B, C, D, E and F used a five-point Likert scale, with 1 being 'Strongly Disagree' and 5 being 'Strongly Agree.' The Likert scale presents a measure of attitude ranging from very positive to very negative, which was designed to allow the respondents to indicate how strongly they agree or disagree with the research questionnaire.

A reliability test for all the variables was conducted, and the results showed that all the variables are reliable, as shown in Table 1 below.

TABLE 1 Reliability Statistics

Variable	Cronbach's Alpha (Pilot Study)
Expected Organisational Reward (10 items)	0.934
Reciprocal Relationship (10 items)	0.796
Self-Efficacy (10 items)	0.813
Enjoyment in Helping Others (10 items)	0.794
Knowledge Sharing Behaviour (10 items)	0.913

RESULTS AND DISCUSSION

Based on this research, the following findings were made. The majority of the respondents are female (60.0%), married (70.0%), between 31 years and 35 years of age (29.1%), and in the position of lecturer (62.7%). The majority had

working experiences of between 6 years and 10 years (31.8%), while 38.2% had 6 to 10 years of working experience at their current universities. This suggests that the majority of the lecturers in these private universities are younger academics.

TABLE 2 Respondents' Profile (N=110)

Respondents' Demographic	Categories	Frequency	Percentages (%)
Gender	Male	44	40.0
	Female	66	60.0
Marital Status	Married	77	70.0
	Unmarried	33	30.0
Age	20-25	10	9.1
	26-30	14	12.7
	31-35	32	29.1
	36-40	21	19.1
	41-50	18	16.4
	51 and above	15	13.6
Designation	Tutor	12	10.9
	Assistant Lecturer	12	10.9
	Lecturer	69	62.7
	Associate Professor	11	10.0
	Professor	6	5.5
Working Experience	Less than 6 years	28	25.5
	6-10 years	35	31.8
	11-15 years	19	17.3
	16-20 years	15	13.6
	21 years or more	13	11.8
Years in current	Less than 6 years	41	37.3
organization	6-10 years	42	38.2
	11-15 years	16	14.5
	16-20 years	8	7.3
	21 years or more	3	2.7

A correlation analysis was used to measure the relationships between two or more variables. In this study, correlations were used to examine the relationships and directions of the linear correlations between the expected organisational rewards, reciprocal relationships, self-efficacies and KS behaviours of lecturers from the four selected private universities. A correlation shows whether two variables (e.g., organizational rewards and knowledge sharing behavior) are related

or not, and if yes, how strong. Based on the statistical terms the relationship between variables is denoted by the correlation coefficient, which is a number between 0 and 1.0. Pearson's r is the most common; the main ideas discussed here are similar for all correlation coefficients.

• If there is no relationship between the variables under investigation (or between the predicted values and the actual values), then the correlation coefficient is 0, or non-existent. As the strength of the relationship between the variables increases, so does the value of the correlation coefficient, with a value of 1 showing a perfect relationship (as mentioned, in variables studied in educational research, or generally in social sciences, it is highly unlikely that such perfect correlations are found).

In general, the higher the correlation coefficient, the stronger the relationship. Tables 3 presents some rules of thumb by Hinklen *et al.* (2003).

TABLE 3
Rule of Thumb for Interpreting the Size of a Correlation Coefficient

Size of Correlation	Interpretation
.90 to 1.00 (90 to -1.00)	Very high positive (negative) correlation
.70 to .90 (70 to90)	High positive (negative) correlation
.50 to .70 (50 to70)	Moderate positive (negative) correlation
.30 to .50 (30 to50)	Low positive (negative) correlation
.00 to .30 (.00 to30)	Little if any correlation

Source: Hinkle, Wiersma & Jurs (2003). Applied Statistics for the behavioural Science (5th edition)

The Relationship between Reciprocal Benefits and Knowledge Sharing Behaviour

H1: Reciprocal benefits are positively related to KS behaviours among lecturers.

Table 4 indicates that the correlation between reciprocal benefits and KS behaviours is 0.525 and that the significance level is 0.00. This indicates that the correlation is positive, and according to

the rule of thumb, the relationship shows a moderate relationship. Hence, the research hypothesis is accepted. The result is also supported by some earlier studies by Wasko and Faraj (2005) and Kankanhalli *et al.* (2005). This result suggests that lecturers in private universities enjoy reciprocal benefits such as long-term mutual cooperation and on-going support, which can provide effective motivations to facilitate KS in their daily activities.

TABLE 4
Correlation Analysis between Reciprocal Benefits and KS Behaviour

		Reciprocal Benefits	Knowledge Sharing Behaviour
Reciprocal Benefits	Pearson Correlation	1	.525**
	Sig. (2-tailed)	110	.000
	N		110
Knowledge Sharing	Pearson Correlation	.525**	1
Behaviour	Sig. (2-tailed)	.000	
	N	110	110

^{**.} Correlation is significant at 0.01 level (2-tailed)

The Relationship between Expected Organizational Rewards and Knowledge Sharing Behaviour

H2: Expected organisational rewards have a positive relationship with KS behaviour.

From the findings shown in Table 5, it is evident that the correlation between the expected organisational rewards and KS behaviour is 0.125 and that the significance level is 0.192. The result is in the situation where p> 0.05. This indicates that there is an insignificant correlation between

expected organizational rewards and KS behaviour, and thus, H2 is rejected. This result is consistent with the finding in a study by Sandhu *et al.* (2011) who found an insignificant relationship between expected organisational rewards and KS behaviour. This finding suggests that current organisational rewards, whether monetary incentives (such as increased salaries) or non-monetary incentives (such as promotions or job security), are ineffective in encouraging lecturers in private universities to share their knowledge.

TABLE 5 Correlation Analysis between Expected Organisational Rewards and KS **Behaviour**

		Expected Organizational Rewards	Knowledge Sharing Behaviour
Expected	Pearson Correlation	1	.125
Organizational	Sig. (2-tailed)		.192
Rewards	N	110	110
Knowledge Sharing Behaviour	Pearson Correlation Sig. (2-tailed)	.125 .192	1
	N	110	110

^{**.} Correlation is significant at 0.01 level (2-tailed)

The Relationship between Self-Efficacy and Knowledge Sharing Behaviour

H3: Self-efficacy is positively related to KS behaviours

Table 6 shows that the correlation between self-efficacy and KS behaviours is 0.509 and that the significance level is 0.00. According to the rule of thumb, the result indicates that correlation is positive and the research can accept H3. In terms of the strength of the relationship, again according to the rule of thumb, it is a moderate relationship between self-

efficacy and KS behaviour. This result supports the research hypothesis, and is also consistent with previous study by Lin (2007). Hence it can be concluded that the lecturers believe in their ability to share their knowledge with others. The lecturers also have confidence in their ability to offer valuable knowledge, as well as to achieve good performance with regard to the tasks and responsibilities of lecturers. The lecturers also believe that their knowledge will help them improve their work and solve problems.

TABLE 6
Correlation Analysis between Self-Efficacy and KS Behaviour

		Self-Efficacy	Knowledge Sharing Behaviour
Self-Efficacy	Pearson Correlation	1	.509**
	Sig. (2-tailed)		.000
	N	110	110
Knowledge Sharing	Pearson Correlation	.509**	1
Behaviour	Sig. (2-tailed)	.000	
	N	110	110

^{**.} Correlation is significant at the 0.01 level (2-tailed)

The Relationship between Enjoyment in Helping Others and Knowledge Sharing Behaviour

H4: Enjoyment in helping others is positively related to KS behaviour among lecturers.

Table 7 indicates that the correlation between enjoyment in helping others and KS behaviour is 0.706 and that the significance level is 0.00. According to correlation rule of thumb, this indicates that the correlation is positive and can be accepted at p < 0.05. In terms of the strength of relationship, according to the rule of thumb, enjoyment of helping others and KS activities are highly related. Hence, the results support the research hypothesis. This result is consistent with the previous study by Olatokun and Nwafor (2012), which suggests that lecturers in private universities enjoy sharing their knowledge with others because they believe that, by sharing their knowledge, they help others solve problems or acquire new knowledge.

TABLE 7 Correlation Analysis between Enjoyment in Helping Others and KS Behaviour

		Enjoyment in Helping Others	Knowledge Sharing Behaviour
Enjoyment in Helping	Pearson Correlation	1	.706**
Others	Sig. (2-tailed)		.000
	N	110	110
Knowledge Sharing	Pearson Correlation	.706**	1
Behaviour	Sig. (2-tailed)	.000	
	N	110	110

^{**.} Correlation is significant at 0.01 level (2-tailed)

The Relationship between Intrinsic Motivation and Knowledge Sharing Behaviour

A regression analysis was used to analyse whether extrinsic motivation (i.e., expected organizational rewards and reciprocal benefits) or intrinsic motivation (i.e., selfefficacy and enjoyment in helping others) have a greater effect on KS behaviour among the academicians in the selected private universities. The results show that the R-value for extrinsic motivation is 0.526, while the R-value for intrinsic motivation is 0.706. This result indicates that intrinsic motivation has a greater effect on KS behaviour, which supports the research hypothesis. This result is consistent with previous studies conducted by Lin (2007) and Wu and Sukoco (2010). The result also implies that the lecturers' willingness to share their knowledge is prompted by internal motivation more than by external rewards. It also suggests that the desire to share knowledge is strongly related to self-efficacy and enjoyment in helping others. This situation supports the notion that 'we get what we give'.

CONCLUSION

This research study investigated the relationship between extrinsic motivation and intrinsic motivation with regard to the KS behaviour of lecturers at four top private universities in Malaysia. KS is an important element in learning institutions, even in private universities.

The research study sought identify what motivates academic staff in the selected private HEIs to share their knowledge. Based on the results, it can be said that in general, academic staff members do have positive attitudes towards KS and have found it to be a useful activity. The motivation to share knowledge is practically supported by the desire to help the organisation reach its goals and to help colleagues, while financial rewards and advancing one's career are seen as less motivating. The study also found that majority of the respondents agreed that they enjoy helping others, especially when they are considered the experts in a particular area. In addition, this variable (i.e.,

enjoyment in helping others) is also suggested as the most important factor prompting KS behaviour for the respondents at the selected private universities. Hence, this paper suggests that management pay attention to opportunities to promote KS behaviour based on this factor.

The study also found that intrinsic motivation influences academic more than extrinsic motivation. Here, the paper again suggests that management should pay attention to providing programmes or avenues for making KS activities common practices that really add value and bring competitiveness to the universities.

The study also revealed that organisational rewards (such as salary incentives, bonuses, and job security) are not a priority or the main reasons that lecturers want to be involved in KS activities. Thus, management should not use extrinsic rewards as a primary KS mechanism since this approach will not be effective. Overall, the findings of this study are supported by previous research findings. For example, previous research has also found that the willingness to share needs to be supported, not only with motivation (Chowdhury, 2005), but also with incentives, the development of a favourable culture and leadership style (Gagné & Forest, 2008), all of which are necessary to enhance KS activities.

RESEARCH LIMITATIONS AND SUGGESTIONS FOR FUTURE RESEARCH

The knowledge sharing behaviour at the higher learning institution should be an area that needs further attention. This is because the outcome of knowledge sharing will contribute to a greater productivity, reputation and effect, not only to the position of the institutions but also the performance of the lecturers.

The current research has some limitations which could be paid attention in the future research. The first limitation of the study is that the current research only focused on the four top leading private universities and thus, it cannot be generalised to all the private universities in Malaysia. Second, this survey only used two variables, which are intrinsic motivation and extrinsic motivation. Other predictors like attitude and culture were not included in this study.

Based on these limitations, the research suggests that future research include qualitative interviews with the respondents to attain more information such as identify the willingness, readiness and eagerness in participating in KS activities. This is because interviews with respondents, discussion and explanation are more in-depth. This qualitative research also helps to give different perspectives and views and perhaps contributes to new variables to be tested in the quantitative survey.

REFERENCES

- Ajzen, I. (1991). The theory of planned behavior. Organizational Behavior and Human Decision Processes, 50, 179–211.
- Bock, G. W., & Kim, Y. G. (2002). Breaking the myths of rewards: An exploratory study of attitudes about knowledge sharing. *Information Resources Management Journal*, 15(2), 14-21.
- Bock, G. W., Zmud, R. W., Kim, Y. G., & Lee, J. N. (2005). Behavioural intention formation in knowledge sharing: Examining the roles of extrinsic motivators. Social Psychological Forces, and Organizational Climate. MIS Quarterly, 29(1), 87-111.
- Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist*, 37, 122- 147.
- Cohen, W. M., & Levinthal, D. A. (1990). Absorptive capacity: A new perspective on learning and innovation. *Administrative Science Quarterly*, 35(1), 128-152
- Davenport, T. H. (2005). Thinking for a living: How to get better performance and results from knowledge workers. Boston, MA: Harvard Business School Press. Retrieved May 22, 2014, from http://www.nickols.us/review_thinking.htm
- Davenport, T. H., & Prusak, L. (1998). Working knowledge: Managing what your organization knows. Boston, MA: Harvard Business School Press.
- Dyer, J. H., & Nobeoka, K. (2000). Creating and managing a high-performance knowledge-sharing network: The Toyota case. *Strategic Management Journal*, *21*, 345-367.

- Fengjie, A. Q., Fei, Q., & Xin, C. (2004, September 13-15). *Knowledge Sharing and Web-based Knowledge-Sharing Platform*. Paper presented at the E-Commerce Technology for Dynamic E-Business, 2004. IEEE International Conference. Beijing, China.
- Gagne, M. (2009). A model of knowledge sharing motivation. *Human Resource Management*, 48(4), 571–589.
- Gagné, M., & Forest, J. (2008). The study of compensation systems through the lens of selfdetermination theory: Reconciling 35 years of debate. *Canadian Psychology*, 49(3), 225– 232.
- Grant, R. M. (1996). Toward a knowledge-based theory of the firm. Strategic Management Journal, 17(Special issue, winter), 109-122.
- Hinkle, D. E., Wiersma, W., & Jurs, S. G (2003).
 Applied Statistics for the Behavioural Science (5th edition). Cengage Learning.
- Hoof, B. V., & Ridder, J. A. (2004). Knowledge sharing in context: The influence of organizational commitment, communication climate and CMC use on knowledge sharing. *Journal of Knowledge Management*, 8(6), 117-130.
- Ipe, M. (2003). Knowledge sharing in organisations: A conceptual framework, *Human Resource Development Review*, 2(4), 337-59.
- Kamal, K. J., Manjit, S. S., & Gurvinder, K. S. (2007). Knowledge sharing among academic staff: A case study of business schools in Klang Valley, Malaysia. UCSI JASA, 2, 23-29.
- Kankanhalli, A., Kwok, K. W., & Bernard, C. Y. T. (2005). Contributing knowledge to electronic knowledge repositories: An empirical investigation. *Mis Quarterly*, 29(1), 113-143.

- Kogut, B., & Zander, U. (1992). Knowledge of the firm, combinative capabilities, and the replication of technology. *Organisation Science*, 3, 383-397.
- Liang, T.P., Liu, C.C., & Wu, C. H. (2008). Can social exchange theory explain individual knowledge-sharing behavior? A meta-analysis. Paper presented at the ICIS.
- Lin, H. F., Lee, H. S., & Wang, D. W. (2008). Evaluation of factors influencing knowledge sharing based on a fuzzy AHP approach. *Journal* of *Information Science*, 35(1), 25-44.
- Lin, H. F. (2007). Effects of extrinsic and intrinsic motivation on employee knowledge sharing intentions. *Journal of Information Science*, 33(2), 135-149. Retrieved April 23, 2013, from jis.sagepub.com.
- Nonaka, I., & Konno, N. (1998). The concept of Ba: Building a foundation for knowledge creation. *California Management Review*, 40(3), 40-54.
- Olatokun W., & Nwafor, C. I. (2012). The effect of extrinsic and intrinsic motivation on knowledge sharing intention among civil servants in Ebonyi State, Nigeria. *Information Development*, 28(3), 216-234.
- Riege, A. (2005). Three-dozen knowledge-sharing barriers managers must consider. *Journal of Knowledge Management*, 9(1), 18–35.
- Sandhu, S. M., Kishore, K., & Ahmad, U. K. (2011). Knowledge sharing among public sector employees: Evidence from Malaysia. *International Journal of Public Sector Management*, 24(3), 206-226.
- Sohail, M. S., & Daud, S. (2009). Knowledge sharing in higher education institutions: perspectives from Malaysia. The Journal of Information and Knowledge Management Systems, 39(2), 125-142.

- Spender, J. C. (1996). Organisational knowledge, learning and memory: Three concepts in search of a theory. *Journal of Organisational Change Management*, 9, 63-78.
- Stenmark, D. (2001). Leverage tacit organizational knowledge. *Journal of Management Information* Systems, 5(3), 9-24.
- Susantri, I. A., & Wood, P. C. (2011). The motivation to share knowledge of employees in the telecommunication service providers in Indonesia. Paper presented at the International Conference on Social Science and Humanity. IPEDR, 5, 159-162. Retrieved May 22, 2012, from http://www.ipedr.com/vol5/no2/36-H10117.pdf.
- Tippins, M. J. (2003). Implementing knowledge management in academia: Teaching the teachers. *International Journal of Education Management*, 17(7), 339-45.
- Wasko, M. M., & Faraj, S. (2005). Why should I share? Examining social capital and knowledge contribution in electronic networks of practice. MIS Quarterly, 9(2), 35-57.
- Wu, W. Y., & Sukoco, B. M. (2010). Why should I share? Examining consumers' motives and trust on knowledge sharing. *Journal of Computer Information Systems*, 50(4), 11-19.
- Yang, C. L., & Ismail, M. A. (2008). Knowledge link: The knowledge management system (KMS) for higher learning institutions (HLIs). KMTALK. net-Malaysian KM Community Portal.
- Ye, S., Chen, H., & Jin, X. (2006). An empirical study of what drives users to share their knowledge in virtual communities. In J. Lang, F. Lin, and J. Wang (Eds.), Knowledge Science, Engineering and Management, Lecture Notes in Artificial Intelligence (pp. 563-575). Retrieved from http://www.springerlink.com.elib.tcd.ie/content/h470k77223059rt6/fulltext.pdf

