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EMPIRICAL STUDY OF KNOWLEDGE SHARING AMONG MULTINATIONAL ACADEMICIANS

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EMPIRICAL STUDY OF KNOWLEDGE SHARING AMONG MULTINATIONAL ACADEMICIANS

Abstract

Knowledge sharing among faculty members may enhance the quality of teaching and research activities. Despite the fact that a number of research has been conducted, to the best of our knowledge, this is the first work that focus on multinational academicians. The aim of this empirical study is to investigate ways and factors which contribute to knowledge sharing in the context of multinational academicians at universities. We performed this study at the Information Technology faculty at one of universities in Saudi Arabia, as a case study. The faculty employed academicians from 10 different countries including Malaysia, Jordanian, Egypt, Saudi Arabia, Tunisia, Pakistan, Yamen, Algeria and Canada. We used qualitative and quantitative approaches. The sample size of this study is N=40, and n=38 responded to the survey. Research results indicate 100% and 95% of academicians preferred to use phone calls and social media respectively, for knowledge sharing. Between 92% and 95% of the respondents have approved that elements of self-esteem which include satisfaction and feeling proud of oneself, respectively, are factors for knowledge sharing. Despite the fact that there is a strong relationship between trust and friendship, there is a need to substantiate that assumption because only 42% of the respondents shared based on a friendship relationship. Respondents also recognized appreciation and monetary rewards as motivation factors. The language used, lack of informal interactions, voluntary efforts are among barriers of knowledge sharing in this context. Findings of this study can be used a guideline for setting up a knowledge sharing mechanism by multinational higher education institutes.

Keywords

Knowledge management, knowledge sharing, homogeneous culture, multinationals

1. INTRODUCTION

Knowledge is power. It is one of the important resources for an individual, an organization or a country. Any type of knowledge started from the intelligence of individuals, and it is visible in procedures, norm, customs, tasks and systems (Iqbal et al., 2011). Knowledge management, (KM) has become one of strategic plans for many organizations around the world. Researchers and practitioners from technological and management background have given a great interest towards KM. Effective KM has been seen as a crucial factor for success in all kinds of sectors including education. KM involves with knowledge creation, storage, management, and sharing. The best way to create KM practices in any organization is through knowledge sharing (Mohajan, 2019). Knowledge sharing is one of mechanisms that companies utilize to gain a competitive advantage in a dynamic economic environment. According to Majid et al. (2015), the concept of KM received tremendous appreciation from senior executives, academicians and researchers. All types of organizations, including academic institutions, have been proposing various approaches to successfully implement different KM initiatives. Higher educational institutions such as universities are considered as knowledge creating entities (Ramayah et al., 2014). These institutions are also known as knowledge-based organizations, because they store knowledge in the mind of their employees, mainly faculty members.

There are two types of knowledge; tacit and explicit knowledge (Mohajan, 2019). Tacit knowledge is stored in human's mind, such as best practices, intuitions, hands-on skills, heuristic, know-how and so on. Explicit knowledge is stored in texts, videos, images, and audios forms which are easily codified and transferable. Knowledge is also observed as assets, for an individual and an organization. These assets are in the forms of databases, policies, documents, procedures, processes, expertise, or experience in individual worker. Knowledge whether it be tacit or explicit, is one of organizational resources. Sustainability of any organization depends on the knowledge that the organization stores and manipulates. In gaining competitive advantage and dynamic economy, it is necessary for any organization to not only focusing on recruiting and selecting knowledgeable employees in specific competencies but also managing and utilizing the existing knowledge within the organization. The organization can utilize tacit knowledge which is stored in one's mind by means of sharing.

In the context of higher education organizations, universities are recognized and defined as knowledge based organizations due to their role as the embodiment of knowledge development and management. Knowledge is very essential for any university to strengthen research and teaching activities. Knowledge sharing is a mechanism that academicians can fully utilize to gain access to the intellectual capital reside within the university, and consequently contribute to the university's innovative and competitive (Iqbal, 2011). Knowledge sharing is immersed as an individual behavior, which refers to attitudes, perspectives, and actions of academicians towards sharing their work-related knowledge and expertise with other faculty members within the university, which can help elevate the standard of the university.

For an example, senior faculty members share knowledge and expertise with junior faculty members in the form of workshops, training, discussions, research collaborations, dissemination of teaching materials, to improve processes of learning and teaching respectively (Ramayah et al., 2014). It is no doubt that sharing knowledge may lead to increase the performance and productivity of academicians.

Knowledge sharing had been an interest of research studies by many researchers. However, despite a number of research work of knowledge sharing among academicians have been conducted around the world, to the best of our knowledge, almost none research has been conducted to understand knowledge sharing perspectives among multinational academicians who work at the same education institute. In addition, not much research has been conducted for understanding knowledge sharing among employees in the context of multinational organizations. The aim of this study is to investigate motivation factors and barriers that affect the knowledge sharing among multinational academicians. In this empirical study, we have taken an IT faculty at one of universities in Saudi Arabia as a study case, given the fact that the majority of academicians in Saudi Arabia are foreigners. These academicians hold different cultures, beliefs, and values than their peers. The result of this study is unique. We conduct this study using quantitative and qualitative methods.

This paper is organized as follows: Section 2 presents definitions of knowledge sharing. Section 3 presents related work in which we classify into two parts; knowledge sharing among academicians and knowledge sharing among multinational employees. Section 4 presents the

materials and methods and section 5 presents the results of this study. Finally, section 6 presents the conclusions of this study.

2. KNOWLEDGE SHARING

Knowledge sharing is a set of individual behaviors involving transferring one's work-related knowledge and expertise to other members within one's organization. This an act contributes to the ultimate effectiveness of the organization. Iqbal et al. (2011) explained sharing of knowledge as "the willingness of individuals in an organization to share with others the knowledge they have acquired or created". Staples & Webster (2008) defined knowledge sharing as it occurs when "one party gives some knowledge that he or she has (explicit or tacit) to another party (a person or a repository)". Knowledge sharing is also described as a process of disseminating and acquiring knowledge, skills and ability from one person to another person.

Any organization can reduce the cost of productions and services by practicing knowledge sharing. Knowledge sharing not only helps the organization to avoid mistakes, but also helps to develop abilities to innovate (Iqbal et al., 2011). This is because knowledge sharing promotes an advancement of the recipient or sharer in a direct or indirect form (Adamseged & Hong, 2018). Studies of knowledge sharing have been conducted within contexts of organizational, interpersonal, team, characteristics as well as cultural characteristics. Within these contexts, factors such as organizational culture, management support, reward and incentives, social networks, emotional influences, individual characteristics, trust, justice, and the beliefs of knowledge ownership have been studied are identified as factors towards knowledge sharing behavior (Wang & Noe, 2010).

3. RELATED WORK

3.1 Knowledge Sharing Among Academician

In an academic organization context, knowledge sharing is seen as a way to raise the quality of teaching and research, maintain organizational knowledge, and assist personal growth of the people within the organization (Adamseged & Hong, 2018). In this context, faculty members are one of the most important constituencies representing their institutions because of their knowledge production and reuse. They have the responsibility of generating knowledge through research, and disseminating the knowledge through teaching (Ramachandran et al., 2009), seminars, and publishing. A study of Supar (2012) previously discovered factors which have an effect on knowledge sharing among academicians. These include the existence of information technology for knowledge sharing purposes and mentoring, management support, knowledge sharing in a work process, distributed model which are positively related to knowledge sharing and performance. Further, Ramayah et al. (2014) reported that higher educational institutions should engage in a significant level of KM activities at various stages of KM such as identifying, creating, organizing, storing, sharing, using and maintaining knowledge.

Despite not many, there are several researchers had conducted their studies specifically on knowledge sharing in academic institutions such as Sadiq & Daud (2009) examined factors and barriers which contribute to successful knowledge sharing among the university teaching staff. Cheng et al. (2009) conducted a study in an academic institution to examine the behavior of knowledge sharing among academic staff. The findings of their studies showed that personal expectation and incentive systems are two significant motivation factors for knowledge sharing.

Iqbal et al. (2011) conducted a study to find out the factors that influence academic staff's knowledge sharing intentions and reported the importance of trust factor for knowledge sharing in academic environments. Hislop et al. (2018) addressed that companion-based trust is the strongest form of trust. It is built through time. Saad & Haron (2013) had gather deeper insight on the knowledge sharing motivation by reporting a qualitative study on identifying factors which influence knowledge sharing among academician in public universities in Malaysia. They collected from fifteen academic staffs at one public university in Malaysia. Their findings indicate there are 7 important factors motivate academicians in public university to share their knowledge. These factors include build reputation, acknowledgement (include gain rewards, get a promotion, recognition), to be knowledgeable, reciprocity, vision and mission, mentoring, personal beliefs (include culture, sense of responsibility, and religion).

Ramayah et al. (2014), studied on knowledge sharing behavior among the academics. Jolae et al. (2014) investigated factors affecting knowledge sharing among academic staff in universities by utilizing the theory of reasoned action as the underlying research framework. The studied factors include subjective norm, attitude, social networks, trust, self-efficacy, and extrinsic reward. Their study revealed that the mentioned factors affect the knowledge sharing behaviors. Sajeve (2014) discussed on how the reward matters to the employees' willingness towards knowledge sharing.

According to Luo (2009), extrinsic rewards and reciprocal relationships have a significant influence on academicians' intention to share knowledge. Research findings of Abdullah et al. (2008) and Razmerita et al. (2016) showed that monetary reward is an important motivation factor for knowledge sharing. According to Abdullah et al. (2008) besides rewards, mutual sharing also has been identified also as one of the factors that could affect the knowledge sharing behavior among academicians.

Mäki & Puhakka (2015) investigated barriers of knowledge sharing in the context of multinational corporation companies and concluded that the diversity of cultures and languages are barriers of knowledge sharing. The author also pointed out communication technology support was a significant barrier. This could be true because the mentioned work was published in the year of 2015. Zain et al. (2019) conducted a study at higher education in Malaysia and also discovered that self-efficacy, attitude and subjective norm have positive effects on knowledge sharing intention.

3.2 Knowledge Sharing Among Multinational Employees

Despite the number of research work for investigating knowledge sharing is numerous, research work in investigating knowledge sharing among multinational employees is very few. In this paper, we address a few of them. For example, Li et al. (2007) conducted a study on knowledge sharing on Chinese and American employees which are employed in the same multinational company. They discovered that language is a barrier factor. They also identified that knowledge sharing is influenced by culture, for example, Chinese people are more conservative in knowledge sharing. Saaristo (2012) also reported that employees have difficulties in sharing their tacit knowledge as their trust relationships between employees partially through ITC-applications.

Inkpen & Pien (2006) investigated the collaboration and knowledge sharing between Chinese and Singaporean employees at the Suzhou Industrial Park and discovered that trust has a significant contribution to knowledge sharing and the extend level of how much knowledge is shared. Fey & Furu (2008) study reported that incentive bonus pay lead to a greater knowledge sharing among employees between different units. King et al. (2007) reported that cultural background has influence on knowledge sharing. They claimed that African employees, whether they are black or white have greater sense of knowledge sharing compared to their European counterparts. They also identified language as a barrier for knowledge sharing. People are reluctant to share their knowledge if they cannot get through their message or they feel difficult to express themselves in the language that is understood by their counterparts.

4. MATERIAL AND METHODS

In this study, we would like to obtain answers whether academicians aware the importance of knowledge sharing, what ways had been used for knowledge sharing, do factors such as self-esteem, trust, appreciation have significant influences towards individual's knowledge sharing behavior, and what are possible barriers that affects the knowledge sharing. This is considered as the first-hand basis study because one of the authors is lucky enough to be working in a diverse multinational higher education institute. We constructed five research questions (RQ) to guide this study;

- **RQ1:** Do academicians at the multinational higher education institute aware the importance of knowledge sharing?
- **RQ2:** What are ways used for knowledge sharing?
- **RQ3:** Are self-esteem, trust, and appreciation factors contribute for knowledge sharing?
- **RQ4:** Does cultural background affects for knowledge sharing?
- **RQ5:** What barriers for knowledge sharing?

The empirical study was conducted using two approaches; quantitative and qualitative. For the quantitative approach, an online survey was distributed to the academic members of IT faculty. The questionnaire was constructed by researchers of this study and reviewed by an expert panel for content

validity and reliability. Questions were derived from previous literature. The survey questionnaire consists of two parts; the first part consists of questions related to demographic data such as gender, age group, nationality and academic rank. The second part of the questionnaire focuses on attitudes and behaviors towards knowledge sharing. Responses from the respondents were collected in the form of five Likert-Scales; strongly agree (SA), agree (A), neutral (N), disagree (D) and strongly agree (SD). The sample size of this study was 40, and 38 of the faculty members responded to the survey. Of the respondents twenty-seven (27) are males. Fig. 1 shows the distribution of respondents based on nationalities.

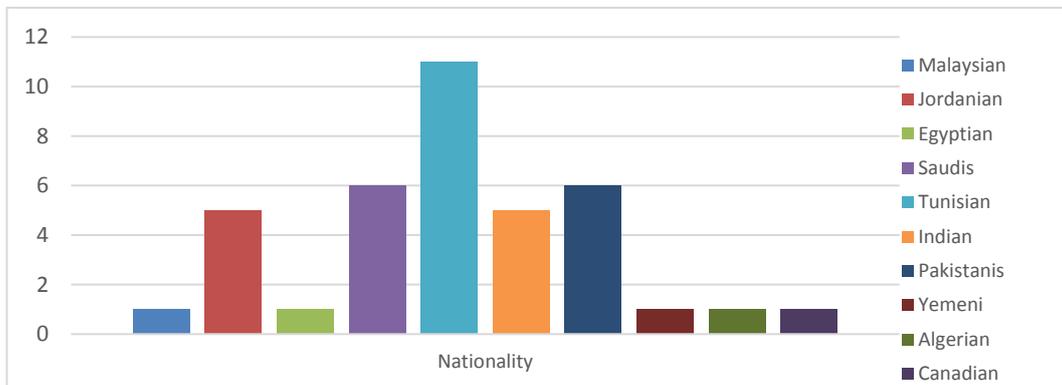


Fig.1: Distribution of respondents based on nationalities

Observation was also used as a qualitative approach. Observation one of authors of this research. This is considered as the first hand basis study for a period of one semester.

5. RESULTS

5.1 Survey

In exploring awareness towards knowledge sharing among peers (RQ1), respondents were given a question in the questionnaire which states “I think knowledge sharing is important”. Survey results show that seventy-four percent (74%) of the respondents answered to *strongly agree* and twenty-four percent (24%) *agree* to the statement. This is a piece of evidence is essential to prove that responses of this survey are valid. As stated by Adamseged & Hong (2018), ways of knowledge sharing is a very important element for knowledge sharing, and Supar (2012) had stated previously that technologies used is an important factor in knowledge sharing. In this study, we would like to discover the best way for knowledge sharing in this context (RQ2). Respondents were asked to select the most used settings for knowledge sharing. Five multiple selection options were given, email (M1), social media (M2), informal meetings (M3), formal meetings (M4) and phone calls (M5). The obtained responses were recorded in Table 1, where the frequency of responses was used for multi selection options; *always*, *sometimes* and *never*.

Table 1: Ways of conducting knowledge sharing

	Ways	Percentage of Responses		
		Always	Sometimes	Never
M1	Email	10.5	68.4	21.1
M2	Social media	36.8	57.9	5.3
M3	Informal meetings	26.3	73.7	0.0
M4	Formal meetings	13.2	55.3	31.5
M5	Phone calls	36.8	63.2	0.0

The obtained results indicate that scores for informal meetings, phone calls, and social media are high, suggesting that these are the ways for knowledge sharing. To examine the most useful way, we combined the frequency of always and sometimes. Results of the study shows that 100% of respondents preferred to use phone calls and informal meetings, while 95% respondents opted to use social media as ways for knowledge sharing (see Fig 2), while the *formal meetings* scored 68%, the least among the five options.

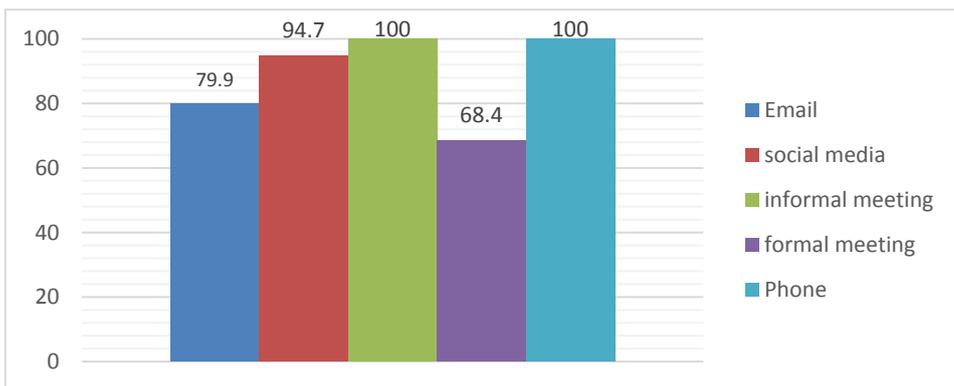


Fig.2: The percentage of respondents in using different ways for knowledge sharing

The interesting part of this result is *social media* and *phone call* scored the highest for *always*, while *informal meetings* scored the highest for *sometimes*. This indicates that phone calls and social media are the best ways for the knowledge sharing among academicians. When both *always* and *sometime* were taken into consideration, social media, phone calls, and informal meetings are the top three options. Interestingly, respondents do not see formal meetings is a setting for knowledge sharing. This finding suggests that informal settings are more encouraging than formal settings for knowledge sharing.

Authors such as Jolae et al. (2014) and Zain et al. (2019) claimed that *self-efficacy* is a strong motivating factor for knowledge sharing. In this study, we would like to explore whether *self-esteem* is also a factor contributes to knowledge sharing (RQ3). We defined five elements of self-esteem. These include *satisfaction* (S1), *feeling good* (S2), *feeling proud* (S3), *feeling competent* (S4 & S5) and *getting praise* (S6). Six questions related to the five elements as in the following, were asked in the survey and obtained results were recorded and presented in Table 2.

Table 2: Survey results related to self-esteem

	Self-Esteem Questions	Frequency of Responses (%)				
		SA	A	N	D	SD
S1	I find that knowledge sharing is personally satisfying	47.4	44.7	7.9	0.0	0.0
S2	When I share my knowledge I want my superior to think I am a good employee.	10.5	36.8	34.3	18.4	0.0
S3	When I share my knowledge I feel proud of myself	36.8	57.9	5.3	0.0	0.0
S4	When I share my knowledge, I want my superior to think I am competent.	10.5	42.1	31.6	15.8	0.0
S5	When I share my knowledge, I want my colleagues to think I am competent.	13.2	42.1	26.3	18.4	0.0
S6	When I share my knowledge, I want my colleagues to praise me.	10.5	34.2	34.2	21.1	0.0

A combination of *strongly agree* and *agree* was used for analyzing the results. Despite more than 50% of respondents feel that they are *competent* (S4, S5), less than 50% of the respondents want their employee to think that they are good employees when they share their knowledge. Despite *praise* (S6) is always admired by many people in general, *praise* from peers is not a motivation factor towards knowledge sharing as the majority of respondents opted for neutral. The obtained results also suggest that *satisfaction* and *feeling proud* are the main self-esteem elements in knowledge sharing, where 92% and 95% of the respondents *strongly agree* and *agree* with the statement of S1 and S3, respectively.

Previous research work of Iqbal (2011) and Jolae et al. (2014), suggested that *trust* (RQ3) is one of the contributing factors that reflect the commitment of academicians to share knowledge. The authors claimed that employees normally share the knowledge if they trust the act of knowledge sharing will bring benefits for them and the whole organization. In this study, we would like to explore this factor among academicians in a multicultural context. Four questions were generated to investigate the *trust* factor. Survey results for each dedicated question are shown in Table 3.

Table 3: Survey results related to a trust factor

No	Trust Questions	Frequency of Responses (%)				
		SA	A	N	D	SD
T1	I prefer to share knowledge with my close friends in the college.	15.8	26.3	28.9	23.7	5.3
T2	I am willing to share my lecture notes, power point slides, and other resources with my colleagues.	50.0	44.7	5.3	0.0	0.0
T3	I feel the information received from my colleagues is trustworthy.	15.8	60.5	18.4	5.3	0.0
T4	My colleagues are willing to share their lecture notes, power point slides, and other resources with me.	18.4	63.2	13.2	5.2	0.0

In analyzing the obtained results for *trust*, a combination of *strongly agree* and *agree* was used. The results reveal that despite more than 94% of the respondents are willing to share teaching materials with their colleagues (T2), only 42% of the respondents prefer to share knowledge with their close friends in the workplace (T1). This indicates, in spite of a common believe that trust and friendships always go along together, it is not the case in the context of knowledge sharing among multinational academicians. This is considered as a plus point. Furthermore, about 76% of the respondents believe that the information they received from sharer is trustworthy (T3), and about 81% of the respondents believe that their colleagues are willing to share their explicit knowledge (T4). The high percentage for *strongly agree* and *agree* with the statement **T2** and the statement **T4**, indicates that trust is a factor which contributes to knowledge sharing in this context. The finding of this study confirms the previous claim.

Appreciation has been recognized as a factor that supports knowledge sharing. In this study, we are investigating whether this factor exists in the context of higher education in a multicultural environment (**RQ3**). Three questions were asked in the survey as follows. Obtained results are presented in Table 4.

Table 4: Survey results related to appreciation factor

	Appreciation Questions	Frequency of Responses (%)				
		SA	A	N	D	SD
A1	Knowledge sharing can be encouraged if it is linked with the performance appraisal of the academic staff.	21.1	47.4	23.6	5.3	2.6
A2	Knowledge sharing can be encouraged if it is clearly linked with rewards.	18.4	57.9	10.6	10.5	2.6
A3	Non-monetary rewards (such as appreciation, recognition) shall be more effective in encouraging knowledge sharing.	21.1	44.7	31.6	2.6	0.0

In analyzing this factor, a combination of *strongly agree* and *agree* and a combination of *disagree* and *strongly disagree* were used. We omitted the *neutral* response in exploring respondents' perspectives, because it is just enough to focus on either it is a positive or a negative response. The first combination was for a *positive response* while the latter was for a *negative response* (see Table 5). It is clear enough that appreciation in the forms of performance appraisal, monetary and non-monetary rewards are very important in knowledge sharing. More than 65% of the respondents believe in non-monetary rewards. The findings affirm that appreciation and recognition are also factors contribute to knowledge sharing in any kind of environment contexts.

Table 5: Frequency of positive and negative responses towards appreciation factor

	Positive Response (%)	Negative Response (%)
A1	68.5	7.9
A2	76.3	13.1
A3	65.8	2.6

Previous researchers such as Manjit et al. (2007) and Jolaei et al. (2014) reported that lack of time, rewards, and recognition are barriers for knowledge sharing. In this study, we would like to investigate what barriers for knowledge sharing in a multicultural environment (**RQ4** and **RQ5**). A set of statements or questions were used to explore barriers for knowledge sharing in the context of multicultural environment. The study focuses on six factors, *interaction* (B1), *willingness* (B2), *lack of time* (B3), *culture similarity* (B4), *language used* (B5), and *reward and recognition* (B6). Relevant questions were created. Obtained results are presented in Table 6.

Table 6: Survey results related to barriers for knowledge sharing.

	Barriers Questions	Frequency of Responses (%)				
		SA	A	N	D	SD
B1	Lack of interaction between those who need knowledge and those who can provide knowledge is a barrier for knowledge sharing	18.4	50.0	13.2	18.4	0.0
B2	I prefer people to approach me rather than I share my knowledge voluntarily.	15.8	44.7	23.7	13.2	2.6
B3	I do not share my knowledge because I do not have enough time for it.	2.6	10.5	23.7	47.4	15.8
B4	I feel difficult to share my knowledge with someone who has different background than me.	7.9	15.8	31.6	36.8	7.9
B5	I feel difficult to share my knowledge because I have to transfer the knowledge in English language, not in my mother tongue language	25.0	25.5	26.0	10.3	13.2
B6	I am not encouraged to share knowledge when there is no recognition and monetary reward.	23.7	57.9	13.2	0.0	5.2

To assess the obtained results, a combination of *strongly agree* and *agree*, and *disagree* and *strongly disagree* were used to examine positive and negative responses (see Table 7). It also our great interest to explore whether academicians feel an ease to share knowledge with their peers who have the same nationalities (RQ4). Interestingly, the obtained result reported in Table 6 indicates that the similarity in culture background (B4) is not a significant factor in this context. To explore RQ5, the results of the survey are presented in Table 7 are analyzed.

Table 7: Frequency of Positive and negative responses towards barrier factors

Frequency of Responses			
	Barrier Factors	Positive (%)	Negative (%)
B1	Lack of interaction	68.4	18.4
B2	Voluntary effort	60.5	15.8
B3	Lack of time	13.1	63.2
B4	Culture background	23.7	44.7
B5	Language used	50.5	23.5
B6	Reward and recognition	81.6	5.2

Obtained results (see Table 7) indicate that lack of *interaction* between peers and *voluntary efforts* are significant barriers for knowledge sharing, however *lack of time* is no a significant barrier to knowledge sharing. The result of lack of time factor seems to contradict the previous study of Manjit et al. (2007). Despite the results reveal cultural differences is not a strong barrier for knowledge sharing among academicians as almost 50% respondents feel negative towards the similarity in culture background, 50% respondents confirmed that language is a barrier factor for knowledge sharing. This suggests the ability to convey a message in English language is very crucial issue in a multinational environment.

The reward factor is also perceived as the most significant barrier to knowledge sharing. About 82% of the respondents gave a positive response to a statement "*I am not encouraged to share knowledge when there is no recognition and monetary reward*" (B6). The results conform with the findings reported in the previous studies. This finding suggests, besides rewards from the top management, interaction between peers is also important to enrich knowledge sharing. This type of organizations has to put efforts for encouraging its employees to interact with each other more such as conducting activities outside the workplace. Besides interaction, a voluntary effort is also an issue in this context. About 60% of the respondents showed a positive response towards the statement "*I prefer people to approach me rather than I share my knowledge voluntarily*", suggesting that the sense of belonging to the organization is a critical factor in a multicultural environment. This may create a barrier for them in knowledge sharing.

5.2 Observation

The observation was done intentionally in several occasions such as in formal meetings, formal gatherings, informal meetings, family gatherings and online discussions on a social media group. The

observer took notes of each occasion and both authors made an analysis on the taken notes. Based on the observation the following issues are discovered:

1. Despite all faculties have the ability to communicate in English language, they have lack of confident to share their tacit knowledge in English language.
2. Faculty members prefer to share tacit knowledge in their mother tongue language.
3. Explicit knowledge is easily shared among the faculty members compared to tacit knowledge.
4. Faculty members express that they will share their knowledge sharing if they are asked for it
5. Despite almost all faculty members satisfy with re-numeration of their teaching positions, they still hope for appreciations in the form of monetary rewards.
6. Some of the faculty members do not feel their efforts in knowledge sharing are well appreciated by their superiors.

The mentioned issues had led to barriers of knowledge sharing, in which we can reason out that language, lack of appreciation from superior, and lack of a comfort zone feeling are significant barriers of knowledge sharing.

6. CONCLUSION

This empirical study aims to explore factors for knowledge sharing in the context of multicultural higher education institutions. The study reveals that faculty members appreciate informal settings such as phone calls and social media for knowledge sharing. The findings of this study conclude that satisfaction, feeling proud, and appreciation, are factors in knowledge sharing. Interestingly, a friendship relationship cannot be considered a strong factor to contribute to knowledge sharing.

The study also reveals rewards and interaction between peers are among important factors to encourage knowledge sharing in the context of multicultural. We can also conclude that extrinsic rewards is a crucial factor for knowledge sharing in all kinds of organization contexts.

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REFERENCES

- Abdullah, R., Selamat, M. H., Jaafar, A., Abdullah, S., & Sura, S. (2008). An Empirical Study of Knowledge Management System Implementation in Public Higher Learning Institution. *International Journal of Computer Science and Network Security*, 8(1).
- Adamseged, H. Y., & Hong, J. J. (2018). Knowledge sharing among university faculty members. *Journal of Education and Practice*, 9, 4.
- Cheng, M. Y., Ho, J. S. Y., & Lau, P. M. (2009). Knowledge sharing in academic institutions: A study of Multimedia University Malaysia. *Electronic Journal of Knowledge Management*, 7(3).
- Ramachandran, D., S., Chong, C. S., & Ismail, H. (2009). The Practice of Knowledge Management Processes: A Comparative Study of Public and Private Higher Education Institutions in Malaysia. *Vine*, 39(3), 203-222.
- Fey, C. F., & Furu, P. (2008). Top Management Incentive Compensation and Knowledge Sharing In Multinational Corporations. *Strategic Management Journal*, 29(12), 1301-1323.
- Hislop, D., Bosua, R., & Helms, R. (2018). *Knowledge management in organizations: A critical introduction*. Oxford University Press.
- Inkpen, A. C., & Wang, P. (2006). The China-Singapore Suzhou Industrial Park: A Knowledge Transfer Network. *Journal of Management Studies*, 43(4), 779-811.
- Iqbal, M. J., Rasli, A., Heng, L. H., Ali, M. B. B., Hassan, I., & Jolae, A. (2011). Academic Staff Knowledge Sharing Intentions and University Innovation Capability. *African Journal of Business Management*, 5(27), 11051-11059.

- Jolae, A., Md Nor, K., Khani, N., & Md Yusoff, R. (2014). Factors Affecting Knowledge Sharing Intention among Academic Staff. *International Journal of Educational Management*, 28(4), 413-431.
- King, N., Kruger, N., & Pretorius, J. (2007, May). Knowledge Management in a Multicultural Environment: A South African Perspective. In *Aslib Proceedings*, 59(3), 285-299. Emerald Group Publishing Limited.
- Li, W., Downey, S., & Wentling, T. (2007). Online Knowledge Sharing in a Multinational Corporation: Chinese versus American Practices. *Proceedings of the American Society for Information Science and Technology*, 44(1), 1-13.
- Luo, H. (2009). Determinants of Knowledge Sharing In University Academic Team. In *2009 Second International Symposium On Knowledge Acquisition And Modeling* (Vol. 1, pp. 260-263).
- Majid, S., Idio, C. D., Liang, S., & Zhang, W. (2015). Preferences And Motivating Factors for Knowledge Sharing By Students. *Journal of Information & Knowledge Management*, 14(01), 1550004.
- Mäki, A.R., & Puhakka, V. (2015). The Barriers of Knowledge Sharing In Multicultural Organization. *Management*, 15.
- Manjit, S., Sandu, K. J., & Sidhu, G. (2007). Knowledge Sharing Among Academic Staff: A Case Study of Business Schools in Klang Valley, Malaysia. *Journal for the Advancement of Science and Arts*, 2, 23-29.
- Mohajan, H. K. (2019). Knowledge Sharing Among Employees in Organizations. *Journal of Economic Development, Environment and People*, 8(1), 52.
- Ramayah, T., Yeap, J. A., & Ignatius, J. (2014). Assessing Knowledge Sharing Among Academics: A Validation of the Knowledge Sharing Behavior Scale. *Evaluation review*, 38(2), 160-187.
- Razmerita, L., Kirchner, K., & Nielsen, P. (2016, October). What Factors Influence Knowledge Sharing In Organizations? A Social Dilemma Perspective of Social Media Communication. *Journal of Knowledge Management*, 20(6), 1225-1246.
- Saad, A., & Haron, H. (2013). A Case Study of Higher Education Academics' Shared Knowledge and Classification. In *2013 International Conference on Research and Innovation in Information Systems (ICRIIS)* (pp. 439-444).
- Saaristo, J. (2012). Knowledge Management and Sharing In Multicultural SME Companies. *Language*, 29102012, 63.
- Sadiq, M., & Daud, S. (2009). Knowledge Sharing In Higher Education Institutions: Perspectives from Malaysia. *Vine*, 39(2), 125-142.
- Sajeve, S. (2014, November). Encouraging Knowledge Sharing Among Employees: How Reward Matters. *Procedia - Social and Behavioral Sciences*, 156, 130-134.
- Staples, D. S., & Webster, J. (2008). Exploring the Effects of Trust, Task Interdependence and Virtualness on Knowledge Sharing In Teams. *Information Systems Journal*, 18(6), 617-640.
- Supar, N. (2012). Technological Factors Affecting Knowledge Sharing Among Academic Staff in Selected Malaysian Higher Educational Institutions and the Effect on Performance. *Journal of Education and Vocational Research*, 3(7), 234-241.
- Wang, S., & Noe, R. A. (2010). Knowledge Sharing: A Review and Directions for Future Research. *Human Resource Management Review*, 20(2), 115-131.
- Zain, R. S., Mutalib, S. K. M. S. A., Dzulkafli, N., Aziz, A. S. N., Rosli, N. A., Yusuf, F. H., & Abidin, H. T. (2019). Factors Affecting Knowledge Sharing Intention among Academic Staff. In *Proceedings of the Second International Conference on the Future of Asean, 2017-volume 1* (pp.209-218).