

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

---

Library Philosophy and Practice (e-journal)

Libraries at University of Nebraska-Lincoln

---

Spring 2-4-2020

## Knowledge Sharing Behavior of Academicians in Pakistan

Qaswa Shahid

University of Sargodha, Sargodha., rana.qaswa@gmail.com

Muhammad Asif Naveed

University of Sargodha, Sargodha., masifnaveed@yahoo.com

Follow this and additional works at: <https://digitalcommons.unl.edu/libphilprac>



Part of the [Library and Information Science Commons](#)

---

Shahid, Qaswa and Naveed, Muhammad Asif, "Knowledge Sharing Behavior of Academicians in Pakistan" (2020). *Library Philosophy and Practice (e-journal)*. 3986.

<https://digitalcommons.unl.edu/libphilprac/3986>

# Knowledge Sharing Behavior of Academicians in Pakistan

By

**Qaswa Shahid\***

**Muhammad Asif Naveed\***

<sup>1</sup>*Department of Library & Information Sciences, University of Sargodha, Sargodha.*

Email: [masifnaveed@yahoo.com](mailto:masifnaveed@yahoo.com)

## **Abstract**

*This study examined the knowledge sharing behavior of the academicians working at University of Sargodha, Sargodha. Quantitative research design using survey method was adopted to conduct this research. The data were collected from 237 academicians using a questionnaire which contained Knowledge Sharing Behavior Scale and demographic variables. Both descriptive and inferential statistics were applied for data analysis. The results indicated that these academicians used to share their knowledge more often through documents and reports, personal conversations, team meetings, participation in brainstorming sessions, organizational meetings, sharing success stories and personal experiences, asking questions, past mistake and failure stories, coaching junior employees, supporting personal development of new members, and making presentations in the meetings. There were no statistically significant mean differences in the index of knowledge sharing behavior based on gender, social background, education, and teaching experience. Conversely, age and number of publications appeared to be the correlatives of knowledge sharing behavior. The results might help university administration in designing programs for promotion of knowledge sharing culture for collaborative learning and research. This study would be a worthy contribution to the existing literature on knowledge sharing in general and knowledge sharing behavior of academicians in particular.*

**Keywords:** Knowledge Sharing; Academicians; Faculty; University Teachers; Pakistan.

## **Background**

Knowledge sharing has been recognized as a prerequisite for the success of knowledge management initiatives in organizations due to its potential for enhancement of organizational performance and provision of a sustainable competitive advantage (Al-Alawi, Al-Marzooqi, & Mohammed, 2007; Alavi & Leidner, 2001; Davenport & Prusak, 1998; Fullwood & Rowley, 2017). It refers to a voluntary act in which employees mutually exchange their knowledge for not only individual but also for organizational benefits (Fullwood & Rowley, 2017; Hislop, 2013; Van den Hoof *et al.*, 2004). Yi (2009) defined knowledge sharing behavior as “a set of individual behaviors involving sharing one’s work-related knowledge and expertise with other members within one’s organization, which can contribute to the ultimate effectiveness of the organization” (p. 68). A perusal of published literature on knowledge sharing indicated that this area has been extensively investigated in commercial environments (Fullwood, Rowley & Delbridge, 2013). There is a growing interest of knowledge management researchers in the public sector organizations (e.g. Brown & Brudney, 2003; Sandhu, Jain, & Ahmad, 2011) especially in the academic environments as limited amount of research has been conducted within universities (Fullwood, Rowley & Delbridge, 2013).

Universities play a central role in knowledge creation and dissemination through research publications. They transfer knowledge to many profitable and non-profitable organizations to support innovations, socio-cultural enterprise, and learning through training programs (Ramachandran, Chong, & Ismail, 2009). It is quite logical and reasonable to expect that universities would have adopted a proactive approach to knowledge management strategies and well-honed understanding for management of their knowledge assets. Therefore, it would be interesting to examine the attitude, actions, and behaviors of academicians in designing knowledge management strategies in general and promoting and cultivating knowledge sharing behaviors in particular. In academia, knowledge sharing is of substantial concern because universities usually face increasing faculty demands for sharing quality resources and expertise (Kim & Ju, 2008; Ramayah, Yeap, & Ignatius, 2014). Despite the growing number of studies on knowledge sharing, scholars have often noted lack of research on academicians' knowledge sharing behavior and the dynamic factors influencing that behavior. There was a need for more investigations focusing knowledge sharing among academics and no such study appeared from Pakistan. Therefore, this study intended to investigate the knowledge sharing behavior of academicians working in different departments at University of Sargodha, Sargodha.

### **Research Objectives**

This research specifically addressed the following research objectives.

- To examine the knowledge sharing behavior of academicians of University of Sargodha, Sargodha-Pakistan.
- To find out the nature of association between faculty members' personal and academic characteristics (i.e., gender, age, social background, education, teaching experience, and number of publications) and knowledge sharing behavior.

### **Literature Review**

Research examining knowledge sharing in the academic context is limited. Previous studies have primarily conducted in Malaysian and Arabian context (Alsuraihi, Yaghi, & Nassuora, 2016; Fullwood, Rowley, & McLean, 2018; Goh & Sandhu, 2013; Tan, 2016). Of these studies, Jain, Sandhu and Sidhu (2007) focused on the academic workforce of 26 public and private higher educational institutes in Malaysia to examine the knowledge sharing behavior and to identify the barriers restricting the academic staff to share their knowledge. The results indicated that the academic staff share their knowledge when they felt that the higher management wants them to share it and they offer reward and appraisal on knowledge sharing. Lack of strategy to share knowledge, lack of awareness and knowledge repositories and an effective knowledge travelling system were the primary barriers in knowledge sharing. The study of Jahani, Ramayah and Effendi (2011) detected the variation in knowledge sharing behaviour of academicians in Iran by collecting data from teachers of 10 renowned universities of Tehran, Sheraz. They explained that the knowledge sharing behavior of academic staff is affected by intrinsic reward system and leadership style of the management.

Iqbal, Rasli, Heng, Ali, Hassan, and Jolae. (2011) had used 125 semi structured questionnaire to analyze the knowledge sharing intentions of academic staff by determining the factors that are more influential for universities. They tried to figure out the relationship

of knowledge sharing behaviors and innovative capabilities of university. The analysis of the data confirmed that higher the knowledge sharing intentions of academicians, higher will be the innovation capabilities of the university. An inquiry by Jolae et al, (2013) examined the factors affecting the knowledge sharing behavior of academic staff in Malaysian universities. Results revealed that academicians' intention to share knowledge is positively affected by their attitude, social network and extrinsic reward. Moreover, knowledge sharing behavior of academicians is also affected by self-efficacy, subjective norm and social network. Consequently, their study paved the path for the educational institutions to motivate their educationists in spreading their knowledge and sharing it with others. Fullwood, Rowley and Delbridge (2013) explored the factors influencing knowledge sharing activities of the academicians at universities of United Kingdom. They collected the data from 230 academics of 11 Universities of UK to find out their attitude and intentions of knowledge sharing by utilizing a survey method. Results indicating that expected rewards and associations, expected contribution, normative beliefs on knowledge sharing, leadership, structure, autonomy, affiliation to institution, affiliation to discipline, and technology platform are the predictors of knowledge sharing. The results revealed that academicians had a positive attitude to share their knowledge and they willingly share their knowledge but universities do have an embedded knowledge culture.

An investigation by Goh and Sandhu (2013) explored the impacts of two emotional factors namely affective commitment and affective trust on knowledge sharing intention. Findings suggested that emotional influence is an important factor influencing knowledge sharing behavior which affects differently in public and private universities. Their research also contributed to existing work by enriching the literature of affecting commitment and affected trust to enhance the sharing behavior of academics. This also provides guide line to university administration to implement such policies which should strengthen the emotional bonding of academicians which in return will facilitate them to share their knowledge. This is more helpful for private universities as the research found out that the intention to share knowledge is relatively low in private universities. The study of Ramayah, Yeap and Ignatius (2014) validated the Knowledge Sharing Behavior Scale (KSBS) using 447 academicians, from 10 local and public universities in Malaysia. The results suggested that KSBS is reliable and valid instrument which can be used to assess knowledge sharing behavior of academicians. It is important for an organization specially the knowledge intensive industries to apprehend when people are eager to share their knowledge and how they can facilitate the environment of knowledge sharing behavior. Nordin, Daud and Osman (2012) investigated t knowledge sharing behavior of academic staff at Higher Education Institutions (HEI) from the public sector in Malaysia. The positive attitude, subjective norm, normative norm and perceived behavioral control were the factors predicting their knowledge sharing behavior. They also suggested that universities should focus on these factors by having practicing behaviour workshops among academic staff.

In Pakistan, only a few studies were conducted on the area of knowledge sharing in academic context. These studies focused on medical students to motivational factors and barriers to knowledge sharing among medical students (Rafique & Anwar, 2017; 2019). No study appeared investigating knowledge sharing behavior of academicians in Pakistan indicating the need for more inquiries on knowledge sharing in academia.

## Research Design

Quantitative research design using survey method was deployed to investigate the knowledge sharing behavior of academicians at the University of Sargodha, Sargodha. This research utilized the survey questionnaire for collecting data. The questionnaire contained Knowledge Sharing Behavior Scale (KSBS), developed by Yi (2009) along with academic and demographic variables such as gender, age, social background, education, teaching experience, and number of publications. KSBS is a 28-item measure having four dimensions, namely, Written Contributions (5 statements, CA= 0.458) Organizational Communication (8 statements, CA= 0.905), Personal Interactions (8 statements, CA= 0.723) and Communities of Practices (7 statements, CA= 0.934). Each statement was measured on a five-point Likert scale (i.e., never, rarely, sometime, often, and always). KSBS is a reliable and validated instrument for assessment of knowledge sharing behavior among academics (Ramayah, Yeap, & Ignatius, 2014).

### Population and sampling

All the faculty members working at the main campus of the University of Sargodha were the population of this study. There were about 700 faculty members, including 279 PhDs in 23 Departments, of University of Sargodha. The recruitment of the survey participants was made through convenient sampling process as the selection of participants through random sampling techniques was not possible due to the non-availability of list of all the faculty members. The sample size for this study was 258 calculated based on 95% level of confidence and five percent margin of error.

### Data Collection and Analysis

The researchers visited each department of the university for self-administration of questionnaire to the faculty member with written permission from the competent authorities. The questionnaires were distributed to the faculty members and they were requested to fill the questionnaire within one or two weeks. After the end of the given time period, the researcher collected the filled questionnaires through personal visits to each department. The researcher received 253 questionnaires indicating a response rate of 90.3% which was quite satisfactory.

Prior to data analysis, the received questionnaires were screened for completeness and accuracy of data which resulted 237 questionnaires completed in all respect and were used for the data analysis. These 237 questionnaires were entered into SPSS for data analysis. Descriptive statistics, e.g. frequency and percentages, and inferential statistics were applied for analyzing the data. First of all, the frequencies and percentages for demographic variables were calculated and then the data related to knowledge sharing behavior of academicians. For relationship testing, an independent sample t-test, one-way ANOVA and Pearson correlation coefficient were calculated.

## Results

### Demographic Information

There were 132 (55.7%) males and 105(44.3%) females in the survey participants indicating quite reasonable balance based on gender. Of the 237 respondents, the age ranges were from 23 to 66 years, with about half of the sample (n = 101, 42.61 %) belongs to the age bracket of up to 30 years, followed by those in the age bracket of 31–40 years (n = 88, 37.13%) and then the age bracket of 41-50 years (n = 36, 15.18 %) and age bracket of 51-60

(n = 10, 4.21%). There were only 2 (0.84 %) who were above 60 years of age, with the age distribution of the respondents indicating that these academicians were in the middle and active stage of their life. As far as social background is concerned, there were 157 academicians (66.2%) who had urban background and 80 (33.8%) academicians belonged to rural background. More than half of these academicians (n = 124, 52.3 %) had completed their MS/MPhil degrees, which was followed by those having doctoral degree (n = 69, 29.1 %). There were only 44 respondents (18.6 %) who had attained BS/MA/MSC degrees. It was quite encouraging that majority of these academicians possess post-graduation. This is due to the policy of Higher Education Commission Pakistan that university teachers must possess minimum 18 years of education, either MPhil or MS, as eligibility criterion for lecturer. Those who had less education migrated from college cadre as this institution became university from college.

Most of the respondents have up to 5 years of teaching experience (n = 126, 53.16%) while academicians with 6-10 years of experience are also considerable in number (n = 54, 22.7 %) followed by those having teaching experience of 11-15 years (n = 36, 15.8 %) and 16-20 years (n = 16, 6.75 %). The academicians with maximum teaching experience of above 20 years of experience are 11 in number (4.64 %). As far as publications is concerned, about one-third of these academicians had number of research publications up to 5. About one-quarter of the survey sample (n=66, 27.84%) did not publish any research paper so far There were 34 participants (14.34%) who published 6-10 publications, followed by those (n = 22, 9.28%) having more than 20 publications and (n = 21, 8.86%) having 11-15 publications. There were only 10 participants (4.21%), who had publications range 16-20. These figures indicated that respondents had a reasonably good level of research and publishing experience as more than two-third had at least one research publication. Although these figures are encouraging for new emerged university, the research culture needs to be promoted at University of Sargodha as this university is far behind than other universities of Pakistan as well as South-Asian Universities and other developing countries of the world.

### **Knowledge Sharing Behavior**

The academicians were asked to record their self-perceived frequency of their knowledge sharing behavior on a five-point Likert scale, namely, always, often, sometimes, rare, and never. The mean and standard deviation of the academicians' responses for each item of Knowledge Sharing Behavior Scale are provided in Table 1. Higher mean scores indicated high frequency of academicians' knowledge sharing behavior. These academicians used to share their knowledge more often through documents and reports, personal conversations, team meetings, participation in brainstorming sessions, organizational meetings, sharing success stories and personal experiences, asking questions, past mistake and failure stories, coaching junior employees, supporting personal development of new members, and making presentations in the meetings with the mean scores 3.51 and above. Sometimes, the faculty members used to share their knowledge through personal files, online discussion boards, meeting with community members, publishing papers in company journals, magazines, or newsletters, providing innovative solutions for problems at hand, sharing prior experiences and practices, online chats, company online databases, e-mail communications, community list-serves, and company supported online community-of-practice system with mean score 3.03 and above.

Table 1  
 Knowledge sharing behavior of academicians (N=237)

Rank	Statements	Mean	SD
1	I submit documents and reports.	3.92	1.04
2	I share passion and excitement on some specific subjects with others through personal conversation.	3.86	1.03
3	I propose problem-solving suggestions in team meetings.	3.85	1.02
4	I answer questions of others in team meetings.	3.84	.99
5	I participate fully in brainstorming sessions.	3.84	1.02
6	I express ideas and thoughts in organizational meetings.	3.82	1.05
7	I ask good questions that can elicit others' thinking and discussion in team meetings.	3.82	.99
8	I support less-experienced colleagues with time from personal schedule.	3.79	.99
9	I share success stories that may benefit the company in organizational meetings.	3.78	1.09
10	I share experiences that may help others avoid risks and trouble through personal conversation.	3.70	.98
11	I keep others updated with important organizational information through personal conversation.	3.67	.96
12	I support personal development of new community members.	3.62	1.02
13	I spend time in personal conversation (e.g., discussion in hallway, over lunch, through telephone) with others to help them with their work-related problems.	3.60	1.06
14	I engage in long-term coaching relationships with junior employees.	3.56	1.03
15	I reveal past personal work-related failures or mistakes in organizational meetings to help others avoid repeating these.	3.54	1.14
16	I make presentations in organizational meetings	3.51	1.08
17	I share documentation from personal files related to current work.	3.43	1.04
18	I keep others updated with important organizational information through online discussion boards.	3.40	1.21
19	I meet with community members to work to encourage excellence in community's practice.	3.32	1.08
20	I publish papers in company journals, magazines, or newsletters.	3.32	1.26
21	I meet with community members to share success and failure stories on specific topics with common interests.	3.26	.99
22	I meet with community* members to create innovative solutions for problems that occur in work.	3.24	1.07
23	I meet with community members to share own experience and practice on specific topics with common interests.	3.22	.99
24	I have online chats with others to help them with their work-related problems.	3.21	1.11
25	I contribute ideas and thoughts to company online databases.	3.08	1.27
26	I spend time in e-mail communication with others to help them with their work-related problems.	3.08	1.12
27	I send related information to members through community e-mail list.	3.05	1.06
28	I share ideas and thoughts on specific topics through company supported online community-of-practice system.	3.03	1.16

### Descriptive statistics for overall KSB Scale and its sub-dimensions

Descriptive statistics were calculated for overall Knowledge Sharing Behavior Scale as well as for all its sub-dimensions. Table 2 exhibited mean, median, mode, standard deviation, variance, minimum and maximum for overall scale and all its sub-dimensions. Higher average scores indicated higher frequency. The comparison of average scores allowed examination of knowledge sharing behavior across the overall scale as well as each of the sub-dimensions. The figures revealed that these academicians share their knowledge more often through 'Organizational Communications' (Mean=3.75, SD= 0.640) which was followed by 'Personal Interactions' (Mean=3.55, SD= 0.653). Sometimes, these academicians share their knowledge through 'Written Contributions' (Mean=3.43, SD= 0.693) and 'Communities of Practice' (Mean=3.24, SD= 0.722). The mean score for overall Knowledge Sharing Behavior Scale was 3.51 which was close to the median 3.57, the standard deviation .511 with minimum scores 1.89 to maximum 4.54.

Table 2

Descriptive statistics for overall KSB scale and its sub-dimensions

Dimensions	Mean	Median	Mode	SD	Variance	Min.	Max.
Written Contributions	3.43	3.40	3.20	.693	.481	1.20	5.00
Organizational Communications	3.75	3.75	4.25	.640	.411	1.25	5.00
Personal Interactions	3.55	3.62	4.00	.653	4.27	1.50	6.88
Communities of Practice	3.24	3.28	4.00	.722	5.23	1.00	5.00
Overall KSB Scale	3.51	3.57	3.68	.511	2.61	1.89	4.54

### Relationship Testing

#### Gender and knowledge sharing Behavior

A series of an independent sample t-tests was conducted to identify the mean differences for overall KSBS and all its sub-dimensions with regard to male (n=132, 55.7%) and female (n=105, 44.3%) academicians. Table 3 revealed no statistically significant mean differences in the knowledge sharing behavior of academicians based on gender as p-values of overall scale and its sub-dimensions were greater than the alpha-value (0.05).

Table 3

Gender and knowledge sharing behavior

Dimensions	Male		Female		t-statistics	P-value
	Mean	SD	Mean	SD		
Written Contributions	3.50	.657	3.34	.729	1.838	.067
Organizational Communications	3.76	.621	3.74	.667	.226	.821
Personal Interactions	3.55	.611	3.56	.705	-.154	.878
Communities of Practice	3.28	.662	3.21	.794	.696	.487
Overall KSB Scale	3.53	.460	3.49	.570	.713	.487

### Age and knowledge sharing behavior

Pearson correlation test was applied to check the relationship between age and knowledge sharing behavior. The results in Table 4 revealed no correlation between academicians' age and knowledge sharing behavior for overall scale and for the sub-dimensions of 'Personal Interactions' and 'Communities of Practice' as p-values were greater than alpha value (0.05). Conversely, there was a statistically significant but positive relationship between age and sub-dimensions of 'Written Contributions' and 'Organizational Communications' as the p-values of these dimensions are less than alpha value. It meant that as the age of academicians increased, the frequency of academicians for knowledge sharing behavior through written contributions and organizational communications also increased.

Table 4

Correlation of age with overall KSB Scale and all its sub-dimensions

Dimensions	Pearson Correlation	P- value
Written Contributions	.316	.000**
Organizational Communications	.131	.044*
Personal Interactions	-.010	.878
Communities of Practice	-.010	.883
Overall KSB Scale	.116	.074

\*\**P-value* < 0.01; \**P-value* < 0.05

### Social background and knowledge sharing behavior

An independent sample t-tests was conducted for exploring the mean differences of the academicians for overall scale and all its sub-dimensions while having social background as an independent variable. Table 5 showed no statistically significant mean differences in the knowledge sharing behavior of academicians based on their social background as p-values of overall Knowledge Sharing Behavior Scale as well as of all its sub-dimensions were greater than alpha-value (0.05).

Table 5

Social background and knowledge sharing behavior

Dimensions	Urban		Rural		t-statistics	P-value
	Mean	SD	Mean	SD		
Written Contributions	3.41	.716	3.46	.648	-.561	.575
Organizational Communications	3.79	.646	3.66	.625	1.441	.151
Personal Interactions	3.55	.651	3.57	.611	-.311	.756
Communities of Practice	3.24	.722	3.27	.727	-.395	.693
Overall KSB Scale	3.52	.525	3.50	4.86	.125	.901

### Education and knowledge sharing behavior

The one-way ANOVA was conducted to compare the mean differences of the survey participations in the index of knowledge sharing behavior based on their education. The results indicated no statistically significant differences in the mean scores for overall scale ( $F=1.449$ ,  $P=0.237 >0.05$ ) and for sub-dimensions of ‘Organizational Communications’ ( $F=1.449$ ,  $P=0.237 >0.05$ ), ‘Personal Interactions’ ( $F=1.157$ ,  $P=0.316 >0.05$ ), and ‘Communities of Practice’ ( $F=0.318$ ,  $P= 0.728 > 0.05$ ). Conversely, there was a statistically significant mean differences with regard to education of respondents for the sub-dimension of ‘Written Contributions’ ( $F=13.250$ ,  $P=0.000 >0.05$ ). A post hoc analysis using Tukey’s HSD for pair-wise comparisons was calculated, as significant mean differences were present for the dimension of ‘Written Contributions’. The results in Table 6 showed participants having low level of education (i.e. BS/MA/MSc- 16 years of education) shared less knowledge through written contributions as compared to high level of education such as MS/MPhil and PhD.

Table 6

Tukey’s Post-Hoc Test for knowledge sharing behavior and qualification

Dimension	Educational Levels			P-value
	BS/MA/MSc (16 years)	MS/MPhil (18 years)	PhD	
Written Contributions	3.1227	3.3629	3.7449	0.000*

\* $P < 0.05$  &  $0.01$

### Teaching experience and knowledge sharing behavior

Pearson correlation test was utilized to check the relationship between teaching experience and overall scale along with its sub-dimensions. Table 7 indicated no correlation between the teaching experience of academicians with overall KSB scale as well as all its sub-dimensions, as p-values greater than alpha value, except for the dimension of ‘Written Contributions’ ( $P = .001 < 0.05$  and  $0.01$ ). In other words, the knowledge sharing behavior of academician through ‘Written Contributions’ increased as the teaching experience increased.

Table 7

Correlation of teaching experience with overall KSB Scale and its sub-dimensions

Dimensions	Pearson Correlation	P- value
Written Contributions	.223	.001**
Organizational Communications	.080	.217
Personal Interactions	-.060	.355
Communities of Practice	-.001	.985
Overall KSB Scale	.660	.355

\*\* $P\text{-value} < 0.01$

## Publications and knowledge sharing behavior

Pearson correlation test was utilized to check the relationship between number of publications and overall scale along with all its sub-dimensions. Table 8 revealed no correlation between academicians' number of publications and knowledge sharing behavior for overall scale and for the sub-dimensions of 'Personal Interactions' and 'Communities of Practice' as p-values are greater than alpha value (0.05). Conversely, there was a statistically significant positive relationship between number of publications and sub-dimensions of 'Written Contributions' and 'Organizational Communications' as the p-values of these dimensions are less than alpha value. It meant that as the academicians' number of publications increased, the frequency of academicians for knowledge sharing behavior through written contributions and organizational communications also increased.

Table 8

Correlation of research productivity with overall KSB Scale and its sub-dimensions

Dimensions	Pearson Correlation	P- value
Written Contributions	.326	.000**
Organizational Communications	.141	.030*
Personal Interactions	.009	.884
Communities of Practice	-0.122	.062
Overall KSB Scale	.096	.167

\*\**P-value < 0.01*

## Discussion

The analysis indicated that the academicians at University of Sargodha shared their knowledge more often through 'Organizational Communications' (Mean=3.75, SD= 0.640) which was followed by 'Personal Interactions' (Mean=3.55, SD= 0.653). Sometimes, these academicians shared their knowledge through 'Written Contributions' (Mean=3.43, SD= 0.693) and 'Communities of Practice' (Mean=3.24, SD= 0.722). The over-all mean of knowledge sharing behavior of academicians was reported as 3.51 with standard deviation of 0.511 (Table 1). The result tends to agree with the previous researches of Nagamani and Katyayan (2013) who has also reported similar results.

The results indicated no relationship between academicians' knowledge sharing behavior and gender. This finding appeared echo with those of Lin (2007) and Miller and Karakowsky (2005) who also reported similar results. Previous studies had shown discrete results towards the relationship between age and knowledge sharing behavior. Some studies (Garg & Rastogi, 2006; Le Tan & Dai Trang, 2017) has shown significant relationship between age and knowledge sharing behavior while other studied (Nagamani, & Katyayani, 2013; Watson & Hewett 2006) reported no correlation between age and knowledge sharing behavior. The present research (Table 4) revealed no correlation between academicians' age and knowledge sharing behavior for overall scale and for the sub-dimensions 'Personal Interactions' and 'Communities of Practice'. This finding is in line with that of Ismail and Yusof (2009) and Pangil and Nasrudin (2008) as these studies reported no relationship

between age and knowledge sharing behavior. Conversely, there was a statistically significant positive relationship between age and sub-dimensions of ‘Written Contributions’ and ‘Organizational Communications’ as the p-values of these dimensions are less than alpha value. It meant that as the age of academicians increased, the frequency of academicians for knowledge sharing behavior through written contributions and organizational communications also increased. This finding appeared to be partially in line with the results of Lou, Yang, Shih, and Tseng (2007) who found as age as the predictor of knowledge sharing behavior. In addition, the social background of the academicians did not predict their knowledge sharing behavior.

A closure looks at the analysis also indicated no statistically significant relationship between educational qualification and knowledge sharing behavior of academicians for overall Scale and for all its sub-dimensions except for the sub-dimension of ‘Written Contributions’. In other words, the academician having post graduate education shared their knowledge more frequently through written contributions than those having under-graduate level of education. This finding also supported by Riege (2005) and Wasko and Fraj (2005) who also reported no relationship between education and knowledge sharing behavior. This finding appeared to be partially in line with Nagamani and Katyayan (2013) who reported that academicians with doctoral degree share knowledge more often as compared to lower degree holders.

As far as the relationship between teaching experience and KSB is concerned, the results of this study (Table 7) indicated no correlation between the teaching experience of academicians with overall KSB scale as well as all its sub-dimensions existed except for the sub-dimension of ‘Written Contributions’. This finding is in line with that of Keyes (2008) and Gumus (2007) who found that no significant relationship exists between professional experience and knowledge sharing behavior. The possible reason for this may be that the academicians considered knowledge and experience as their prized possession. They used to treat their experience as their commodity which gives them a dominant place in the academia and they don’t want to share their status with other by sharing their knowledge. Mogotsi, Boon, and Fletcher (2011) has also explained that with increase in experience, the enthusiasm for knowledge sharing dies in academicians and they seem it to be their own expertise. On the other hand, the academicians’ number of publications also appeared to be the correlative of their knowledge sharing behavior (Table 8) as there was a statistically significant positive relationship between number of publications and sub-dimensions of ‘Written Contributions’ and ‘Organizational Communications’ which meant that as the academicians’ number of publications increased, the frequency of academicians for knowledge sharing behavior through written contributions and organizational communications also increased.

## **Conclusion**

The awareness with regard to motivators and barriers to knowledge sharing needed to be created among academicians so that they might be able to exchange innovative ideas and experiences to learn from each other. The university administration should design program for promotion of knowledge sharing culture by emphasizing collaborative learning and research if the universities wants to enhance their innovative capabilities, research productivity, and quality of research. Effective knowledge-sharing behaviors can be fostered

through intrinsic motivators (reputation, organizational rewards) and extrinsic motivators (commitment, altruism) associated with academics' intentions for knowledge sharing (Tan & Ramayah, 2014). The voluntary and active knowledge sharing manpower is the most important for enhancement of organizational performance, provision of a sustainable competitive advantage, and improvement of university ranking. The academicians should also create awareness about the importance of knowledge sharing and draw backs of knowledge hoarding among students as they are expected to join workforce of the varied walks of life.

## References

- Al-Alawi, I. A., Al-Marzooqi, N. Y. & Mohammed. Y. F. (2007). Organizational culture and knowledge sharing: Critical success factors. *Journal of Knowledge Management*, 11(2), 22–42.
- Alavi, M. & Leidner, D.E. (2001). Knowledge management and knowledge management systems: Conceptual foundations and research issues, *MIS Quarterly*, 25(1), 107-136.
- Alsuraihi, M. D., Yaghi, K. & Nassuora, A. B. (2016). Knowledge sharing practices among Saudi academics: A case study of King Abdulaziz University.” *Journal of Current Research in Science*, 4 (1): 63-74.
- Brown, M. & Brudney, J. (2003). Learning organizations in the public sector? A study of police agencies employing information and technology to advance knowledge, *Public Administration Review*, 63(1), 30-43.
- Davenport, T. & Prusak, L. (1998). *Working knowledge*, Harvard Business School Press, Cambridge, MA.
- Fullwood, R. & Rowley, J. (2017). An investigation of factors affecting knowledge sharing amongst UK academics, *Journal of Knowledge Management*, URL: <https://doi.org/10.1108/JKM-07-2016-0274>.
- Fullwood, R., Rowley, J. & Delbridge, R. (2013). Knowledge sharing amongst academics in UK universities. *Journal of Knowledge Management*, 17(1), 123-136.
- Fullwood, R., Rowley, J. & McLean, J. (2018). Exploring the factors that influence knowledge sharing between academics, *Journal of Further and Higher Education*, DOI: [10.1080/0309877X.2018.1448928](https://doi.org/10.1080/0309877X.2018.1448928)
- Goh, S. K., & Sandhu, M. S. (2013). Knowledge sharing among Malaysian academics: Influence of affective commitment and trust. *Electronic Journal of Knowledge Management*, 11(1), 38-48.
- Hislop, D. (2013). *Knowledge Management in Organizations*, Oxford University Press, Oxford.
- 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.
- Jahani, S., Ramayah, T., & Effendi, A. A. (2011). Is reward system and leadership important in knowledge sharing among academics. *American Journal of Economics and Business Administration*, 3(1), 87-94.
- Jain, K. K., Sandhu, M. S., & Sidhu, G. K. (2007). Knowledge sharing among academic staff: A case study of business schools in Klang Valley, Malaysia. *JASA*, 2, 23-29.

- 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.
- Nagamani, G., & Katyayani, J. (2013). Academician's perception towards institutional culture: Empirical study of private engineering colleges. *International Journal of Management and Social Sciences Research*, 2 (12) 39-46.
- Nordin, N. A., Daud, N., & Osman, W. U. K. M. (2012). Knowledge sharing behaviour among academic staff at a public higher education institution in Malaysia. *International Journal of Social, Management, Economics and Business Engineering*, 6(12), 696-701.
- Rafique, G. M. & Anwar, M. A. (2017). Motivating knowledge sharing among undergraduate medical students of the University of Lahore, Pakistan. *Journal of Information and Knowledge Management*, 16(4), 1-15.
- Rafique, G. M. & Anwar, M. A. (2019). Barriers to knowledge sharing among medical students in Pakistan. *Journal of Hospital Librarianship*, 19(3), 235-247.
- Ramachandran, S. D., Chong, S. C., & Ismail, H. (2009). The practice of knowledge management processes: A comparative study of public and private higher education institutions in Malaysia. *VINE: The Journal of Information and Knowledge Management Systems*, 39, 203–222.
- Ramayah, T., Yeap, J. A., & Ignatius, J. (2014). Assessing knowledge sharing among academics: A validation of the knowledge sharing behavior scale (KSBS). *Evaluation Review*, 38(2), 160-187
- Sandhu, M., Jain, K. & Ahmad, I. (2011). Knowledge sharing among public sector employees: Evidence from Malaysia'', *International Journal of Public Sector Management*, 24(3), 206-226.
- Tan, C. N. L. (2016). Enhancing knowledge sharing and research collaboration among academics: The role of knowledge management. *Higher Education*, 71 (4), 525–556.
- Van den Hooff, B. & de Leeuw van Weenen, F. (2004). Committed to share: Commitment and CMC use as antecedents of knowledge sharing, *Knowledge and Process and Management*, 11(1). 13-24.
- Yi, J. (2009). A measure of knowledge sharing behavior: Scale development and validation. *Knowledge Management Research & Practice*, 7(1), 65-81.
- Garg, P., & Rastogi, R. (2006). Climate profile and OCBs of teachers in public and private schools of India. *International Journal of Educational Management*, 20(7), 529-541.
- Le Tan, T., & Dai Trang, D. T. (2017). The effects of demographic variables on knowledge sharing behaviour. *Business Economics Scientific Journal*, 22(2), 107-116.
- Watson, S., & Hewett, K. (2006). A multi-theoretical model of knowledge transfer in organizations: Determinants of knowledge contribution and knowledge reuse. *Journal of Management Studies*, 43(2), 141-173.
- Pangil, F., & Nasurdin, M. A. (2008). Demographics factors and knowledge sharing behavior among R&D employees (pp. 1-6). Faculty of Information Technology Universiti Utara Malaysia.
- Ismail, M. B., & Yusof, Z. M. (2009). Demographic factors and knowledge sharing quality among Malaysian government officers. *Communications of the IBIMA*, 9(1), 1-8.
- Lou, S., Yang, Y., Shih, R., & Tseng, K. (2007). A study on the knowledge sharing behaviour of information management instructors at technological universities in

- Taiwan. *World Transactions on Engineering and Technology Education*, 6(1), 143-148.
- Lin, H. F. (2007). Knowledge sharing and firm innovation capability: An empirical study. *International Journal of Manpower*, 28(3/4), 315-332.
- Miller, D. L. & Karakowsky, L. (2005). Gender influences as an impediment to knowledge sharing when men and women fail to seek peer feedback. *The Journal of Psychology: Interdisciplinary Applied*, 139(2), 101-118.
- Gumus, M (2007). The effect of communication on knowledge sharing in organizations. *Journal of Knowledge Management Practice*, 8(3), 15-26.
- Keyes, J. (2008). Identifying the barriers of knowledge sharing in knowledge intensive organizations (PhD Thesis). Graduate faculty of business and technology management, North Central University, USA.
- Mogotsi, I. C., Boon, J. H., & Fletcher, L. (2011). Knowledge sharing behaviour and demographic variables amongst secondary school teachers in and around Gaborone, Botswana. *South African Journal of Information Management*, 13(1), 1-6.
- Riege, A. (2005). Three-dozen knowledge-sharing barriers managers must consider. *Journal of knowledge management*, 9(3), 18-35.
- Wasko, M. M., & Faraj, S. (2005). Why should I share? Examining social capital and knowledge contribution in electronic networks of practice. *MIS Quarterly*, 29(1), 35-57.
- Tan, C. N. & Ramayah, T. (2014). The role of motivators in improving knowledge-sharing among academics. *Information Research*, 19(1).