

Academicians' Years of Research Involvement on Sharing of Knowledge in Malaysian University

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Abstract

Knowledge sharing in Malaysian universities is an important driving element in enhancing the reservoir of information and offering fresh knowledge to students. However, comprehensive study on knowledge sharing among university academicians, particularly those with diverse employment backgrounds, has received little attention. The purpose of this study was to compare academicians with 10 years or less of research involvement to academicians with 11 years or more of research involvement on three knowledge sharing factors: organizational factor, technological factor and individual factor. This research is being carried out using a series of survey instruments among academicians at Universiti Kebangsaan Malaysia (UKM). Results from this study established that the two groups of academicians mutually approve that all factors are critical especially knowledge self-efficacy and reciprocal benefits under individual factors, but significant factors that are considered moderately central are organizational rewards under organizational factors and system quality under technical factors. These findings demonstrate that, while there are no major issues with academics' individual factors in knowledge sharing, UKM's organization and technology in knowledge sharing have space for development, particularly in terms of organizational rewards and system quality.

Keywords: Knowledge Sharing, Organizational Factors, Technological Factors, Individual Factors, Academicians' Research Involvement, Malaysian University.

Introduction

The expansion of Malaysian universities has created an unusual environment of information exchange among academicians, as they are actively engaged in the knowledge economy. As a result, it is vital for all academicians to grasp knowledge sharing and the implications of applying knowledge sharing to their enterprises. Academicians must understand the need of upgrading their knowledge in order to act as a pool of information; where knowledge generation, dissemination, and learning are engaged. Much has been said about knowledge sharing, but less has been said about years of research involvement among university

academics, particularly their number of years in professional settings. Academicians in universities should be skilled in knowledge sharing, and in the process of sharing knowledge, and there are three main elements involved; namely organizational, technological, and individual factor (Lin, 2007).

One of the variables that impact the process of information sharing in a company is organizational factors. Knowledge sharing is seen to be one of the numerous strategies to increase the influence of knowledge in companies (Quinn et al., 1996). Individual knowledge may be transformed into organizational knowledge through contact and communication of individual coworkers, in project teams, or across projects, and these knowledge sharing activities can assist in developing knowledge on a higher level (Nonaka et al., 1994). Similarly, via information exchange, an organisation may transform individual expertise into organizational knowledge.

Employee motivational knowledge sharing behaviour has been frequently disputed by using self-determination theory (Ryan & Deci, 2000). There are a few well-known elements that contribute to the success of knowledge sharing within individual factors such as trust, knowledge self-efficacy (Van Acker et al., 2014) and reciprocal benefits (Chennamaneni et al, 2012; Lin, 2007). Lai and Lee (2007) mentioned that self-efficacy, job autonomy and trust directly inspired a desire to share knowledge.

Since the dawn of the knowledge management era, the primary tenets have revolved on information technology and technology-driven processes (Davenport & Prusak, 1998) while organizational culture, structure and information technology affected workers' ability to share information (Lee, 2001). Orlikowski (1992) specified two main factors in the concept of technology. Many have lately joined virtual communities in order to share data, collaborate on research, and exchange messages that provide insights in knowledge sharing (Liao et al, 2013).

Knowledge Sharing Overview

This research defines knowledge as a mix of experience, values, contextual information, and proficient comprehension (Davenport & Prusak, 1998), that many researchers and practitioners have underlined this as a critical and low-cost source of organisational success (Quinn et al., 1996; Albert & Bradley, 1997). Organizations may not survive in the Knowledge Era unless they have an adequate strategy for managing and influencing the value of their intellectual assets (Abell & Oxbrow, 2001). As a result, a vast number of businesses, both small and large, are turning to knowledge management techniques to manage and use their whole organizational knowledge (Davenport & Prusak, 1998). Knowledge management in this context is the process of identifying, selecting, and disseminating evidence and knowledge that is critical for corporate activity (Gupta & Govindarajan, 2000). Since knowledge sharing occurs in interactions between people, organizations, and technology; organizations should consider factors that include people, organizations, and technology (Noor et al., 2014).

Previously, business organizations governed the research of knowledge sharing, with their ultimate objective for knowledge sharing being revenue-motivated. However, the issue of knowledge sharing is also essential for a knowledge-based institution, such as a Higher learning institutions (HLI), where the major activity of the institution is knowledge generation,

dissemination, and relevance (Petrides & Nodine, 2003). With the increased number of HLIs in Malaysia, there is a need for them to enhance their institution's expertise in order to differentiate themselves as a reservoir of information rather than simply imparting knowledge to students. However, there has been little comprehensive study in the domain of knowledge sharing among university faculty academicians, particularly in terms of academicians' research involvement. This sparks the motivation for this paper to further understand the different years of research involvement among academicians on knowledge sharing based on the three factors, namely organizational factors, technological factors and individual factors in Malaysian university.

Objective of Study

Therefore, this study is focussed:

- a. to identify the comparison of perceptions of academicians with 10 years of research involvement and below and academicians with 11 years and above on organizational factors on knowledge sharing in HLIs.
- b. to identify the comparison of perceptions of academicians with 10 years of research involvement and below and academicians with 11 years and above on technological factors on knowledge sharing in HLIs.
- c. to identify the comparison of perceptions of academicians with 10 years of research involvement and below and academicians with 11 years and above on individual factors on knowledge sharing in HLIs.

Literature Review

Knowledge sharing is considered as one of the fundamentals of knowledge management. According to the International Labour Organisation (ILO, 2006) knowledge sharing is “a process that begins with recording and organizing knowledge and experience received from others, then moves on to making that knowledge accessible to a larger audience, thereby developing new links between interest groups.”. Knowledge sharing also contains the transfer or diffusion of knowledge among individuals or organizations as a foundation for knowledge operation to produce competitive advantage for the industry (Noor et al., 2014). Lee (2001) has defined knowledge sharing as “activities of transferring or disseminating knowledge from one person, group, or organization to another”, while Van den Hooff & de Ridder (2004) have further expounded on this view, adding that knowledge sharing is a process in which people exchange their knowledge and work together to create new knowledge.

Knowledge sharing increases the likelihood of capitalizing on an organization's ability to address those demands by generating solutions and skills that give a company a competitive advantage (Razmerita et al., 2016). Knowledge sharing in an organization is the process of capturing, organizing, reusing, and transferring experience-based knowledge that exists within the organization and making that knowledge accessible to others in the company (Lin, 2007). Knowledge sharing is essential, according to a number of studies, because it allows firms to boost their innovation performance while also reducing redundant learning efforts (Wasako & Faraj, 2005).

An individual's intellectual capital grows over time as he or she interacts with others who are doing the same drills and learns the skills, knowledge, specialized discourse, and practice norms, which can be increased either by hands-on familiarity or through tales presented

through time (Wasako & Faraj, 2005). Working experience refers to the knowledge or skill gained from performing, witnessing, and feeling an action that requires physical or mental determination. According to Polanyi (1958), the capability to know is processed through a form of understanding. Knowledge sharing is associated to the continuous of routine as well as competitiveness (Cabrera & Cabrera, 2005). Knowledge from experiences gather by the social groups in inter and intra divisions, internal processes and even outside establishments is essential in knowledge sharing developments (Michailova & Minbaeva, 2012). Individuals' knowledge, comprehensions, and working experience that are relevant to the current task may also be referred to as knowledge sharing (King, 2007) as knowledge sharing aims to improve and smooth the flow of tacit knowledge between members of an organization. (Trivellas et al., 2015). Individuals who have a greater understanding and experience with their expertise are more likely to be able to share it. However, there must be explanations or factors that motivate them to utilize knowledge sharing in the workplace.

Knowledge sharing, on the other hand, is a difficult process because individuals, and units frequently hold knowledge in organizations or groups (collective forms) dispersed throughout the organization and occasionally over geographical borders (Argote & Ingram, 2000). Maintaining, identifying, and using knowledge in an organization are all issues in knowledge management. The main difficulty in knowledge management is to improve knowledge generation and sharing, as knowledge management's success or failure is always dependent on this (Wasako & Faraj, 2005).

Furthermore, knowledge is recognized as socially complex because it is held by people and requires an individual relationship to obtain it, as well as sticky and causally ambiguous because it is embedded in a multifaceted network of formal and informal interactions, making it difficult for organizations to efficiently share it (Sanchez et al., 2013; Szulanski, 2000)

The ability to effectively manage knowledge is now considered as being dependent on the relationships that exist between personnel within the company (Quinn et al., 1996). Organizational, individual, and technological factors all have an impact on employee knowledge sharing initiatives, according to researches (Chou et al., 2014).

Organizational knowledge sit on tacit and explicit knowledge and both are fundamental in harmonizing each other and vital for knowledge creation (Nonaka et al., 2000). Explicit knowledge without tacit insight quickly loses its value because others easily replicate it, hence it must be shared with others in order to promote new ideas and learning. Tacit knowledge that cannot be documented and disseminated throughout the organization runs the risk of being lost when the individual who possesses it leaves. New knowledge or knowledge innovation is formed here as a result of collaborations between tacit and explicit information, rather than from either tacit or explicit knowledge on its own (Nonaka et al., 2000). As a result, it is critical to manage and disseminate both types of knowledge appropriately, because different types of knowledge provide distinct benefits to businesses (Cabrera & Cabrera, 2005). This view offers a fresh perspective on the value of various types of information to various individuals, groups, and organizational units.

Management support is a vital organizational aspect that could help to improve knowledge sharing. Cabrera & Cabrera (2005) outline that staffing, job design, performance appraisal, remuneration systems, managing styles, and drill are all related to management support, which is a determinant in knowledge sharing. Furthermore, factors like participatory decision-making and top-management confidence were found to be positively connected to information sharing (Park et al., 2004).

Organizational Reward is another important organizational factor that could result in positive sharing of knowledge. Roca & Gagne (2008) found that need satisfaction was positively related to knowledge sharing, and that while rewards could be made partially contingent on knowledge sharing actions, such as merit pay, rewards based on joint performance, such as team-based rewards and organization-wide incentives (profit sharing, gain sharing, and employee stock options), are also likely to be effective in creating a sense of collaboration, ownership, and assurance among employees.

The values, ideas, and systems that may inspire or inhibit knowledge production and exchange within organisations are referred to as organizational culture or corporate culture (Bartol & Srivastava, 2002). For each organization, there is an exclusive culture that expresses the organization's identity on two scales: visible and invisible (Bibi & Ali, 2017). The visible culture of an organisation evolves over time and comprises the business's adopted values, mission, and philosophy. The invisible component, on the other hand, is more concerned with the employees' norms and principles that influence their behaviour and activities (Razmerita et al., 2016). While organizational culture in terms of sharing norms was found to be clearly associated to knowledge sharing behavior in organizations, it was also discovered that there is a positive link between opportunities to share, which include organizational culture that encourages knowledge use and sharing (Chou et al., 2014). Bock & Kim (2002) establish that favorably associated to knowledge sharing mindsets and behaviors were expectations to grow work relationships and make a substantial impact to organizational success, and Park et al (2004) further found that a culture that encourages and inspires information sharing is one that promotes teamwork, employee support, and autonomy.

There are a number of individual factors with individual variables that contribute to information sharing include trust, knowledge self-efficacy, and reciprocal rewards. Lin (2007) found that self-efficacy, job autonomy, and trust directly influenced the willingness to share knowledge.

In a social environment, trust has numerous aspects, the most important of which is that it can refer to a situation in which one party is ready to rely on the actions of another party to grow and appraise expectations. Trust is also defined as the act of making oneself accessible to others based on a positive assessment of the outcome of one's actions, and it is seen as the most important aspect of any affiliation inside an organization (Noor et al., 2014). The degree to which one party trusts another is a measure of that party's belief in the other's trustworthiness, fairness, or compassion, which enriches information sharing inside the organization and can boost knowledge sharing (Hau et al., 2013).

Self-efficacy is the point at which one's trust in one's own ability to complete tasks and achieve goals influences employees' willingness to share knowledge (Lin, 2007). While reciprocal is usually associated with a bond in which one party's action is met or defied by another party's action. Reciprocity is a social rule in social psychology that states that people will reciprocate what another person has done for them in the same way (Cialdini et al., 2006). It's about returning (reciprocate) the identical behavior obtained from the second person previously.

System Infrastructure is a critical organisational aspect that could lead to more effective knowledge sharing. According to Orlikowski (1992), the scope and function of technology are the two major pillars of the concept. There are two categories of studies in terms of scope (Ismail & Yusof, 2010). One, the research which take technology as 'hardware'; and two, the research with the viewpoint of technology as 'social technology'. In terms of function, early study envisions technology as a goal, whereas later research focuses on technology as a product that includes people's interaction with it. According to recent study, technology is a soft determining factor, in which it is viewed as an external component that has an impact but is governed by humans and organisations, and has always been an important variable in organisational theory (Orlikowski, 1992; Ismail & Yusof, 2010).

While System Quality involves the usage of information systems range from pleasure, such as online games and social groups, to practical applications, such as e-learning, e-commerce, and knowledge management systems. Until recently, many people used virtual groups to share information, collaborate on research, and exchange messages that influenced knowledge sharing (Acker, 2014)

There are several factors that contribute to knowledge sharing success, and researchers have identified motivation as a role of reciprocity issues, relationships with recipients, and remunerations, in addition to attitudes to share knowledge, working culture, inspiration to share, and opportunities to share (Ipe, 2003), while other scholars argue that both tangible (monetary) and intangible (non-monetary) rewards are equally essential in encouraging knowledge sharing (McDermott & O'Dell, 2001).

Methodology

This research is in the form of a descriptive study on academicians' impressions on years of research involvement among university academicians, especially regarding their number of years in conducting research. According to Wiersma (1995), this method is appropriate for gauging or assessing a program's attitude, perception, and achievement. The descriptive form is also utilized in accordance with the study's necessity to comprehend in its actual condition (Konting, 1990). As a result, a survey instrument based on the literatures chosen is created for this study. According to Tuckman (1999), a questionnaire is a useful tool for gathering information from respondents. All of the questions are positive in nature, and respondents were asked to express their opinions on a Likert scale.

This study is conducted through a set of survey among research academicians in Universiti Kebangsaan Malaysia (UKM). Academicians are chosen from a pool of candidates from 5 faculties, 2 faculties from the pure sciences group and another 3 faculties representing the social sciences group in UKM. Thus, to regulate the number of respondents, The Sample Size

Determination Table by Krejcie & Morgan (1970) is enacted. The sample size for this research is 38 based on Krejcie & Morgan (1970)'s Sample Size Determination.

The validity of the questionnaire is assessed by an expert. The term "reliability" relates to the instrument's stability and consistency when measuring a specific idea. The Cronbach Alpha is a popular measure for determining a concept's consistency is applied. The reliability value of the Cronbach Alpha is between 0.0 and 1.0. According to (Konting, 1990), the Cronbach Alpha value with more than 0.60 is often applied as the reliability index in a particular research. Thus, in this study, researcher has determined the Cronbach Alpha value that is more than 0.60 as the reliability value for every section of the questionnaire being carried out. The researcher then conducted a pilot study to determine the questionnaire's reliability value.

The purpose of the pilot study was to identify the questionnaire's strengths and flaws. As a result, ten academicians were chosen to answer the questionnaire first before it was distributed. The results reveal that all ten academicians have a thorough understanding of the questions. Then, by using the *Statistical Package for the Social Science (SPSS)* program version 21, it is confirmed that the Cronbach Alpha value for all the items of the questions obtained more than 0.6. As a result, the questionnaire created for this study is deemed appropriate for usage.

Results and Discussions

Findings and Discussions on Respondents

The background of the respondents are as outlined in Table 1. The number of academicians researchers from Pure Sciences comprises of 36.9 percent and Social Sciences academicians researchers give a number of 63.1 percent. Majority of the respondents are Senior Lecturers (44.7 %) with 65% of them have been serving UKM for over 11 years. 73.7 percent of the respondents hold PhD with sound expertise and knowledge in their given fields, with 57.9 percent of them involve in research between 1 to 10 years.

From the demographic data collected, the field of expertise among UKM academicians are generally divided into two; pure sciences and social sciences. For the position related to their post, they are categorized under the post of Professor, Associate Professor, Senior Lecturer and Lecturer. From the data, Senior Lecturers and Associate Professors make the majority with experience of work between 12 to 20 years of service with 6 to 10 years experiences in research. All the above indicators demonstrate to us that these academicians are active in conducting research, which make really important for them to share knowledge and gain networking in their expertise to enhance their research activities, publication as well as teaching.

Table 1

Respondent Background

| <i>n</i> = 38 | Numbers | Percentages |
|---|---------|-------------|
| Name of affiliation | | |
| Faculty of Science & Technology | 2 | 5.3 |
| Faculty of Technology & Information Science | 12 | 31.6 |
| Faculty of Economics & Management | 5 | 13.2 |
| Faculty of Social Science & Humanities | 14 | 36.8 |
| Faculty of Islamic Contemporary Studies | 5 | 13.2 |
| Position in this organization | | |
| Professor | 3 | 7.9 |
| Associate Professor | 9 | 23.7 |
| Senior Lecturer | 17 | 44.7 |
| Lecturer | 9 | 23.7 |
| Years of working | | |
| 1-5 | 8 | 21.1 |
| 6-10 | 5 | 13.2 |
| 11-20 | 18 | 47.4 |
| 21 & above | 7 | 18.4 |
| Highest Qualification in Education | | |
| Doctoral Degree | 28 | 73.7 |
| Master's Degree | 7 | 18.4 |
| Bachelor Degree | 3 | 7.9 |
| Years of Involvement in Research | | |
| 1 year & below | 2 | 5.3 |
| 2 - 5 years | 7 | 18.4 |
| 6 - 10 years | 13 | 34.2 |
| 11 - 15 years | 8 | 21.1 |
| 16 - 20 years | 4 | 10.5 |
| 21 - 25 years | 2 | 5.3 |
| 26 years & above | 2 | 5.3 |

Findings and Results on the Factors

1. **Organizational Factors** (Top Management Support, Organizational Rewards and Organizational Culture)

Table 2

Organizational Factors

| | Low | Moderate | High |
|-------------------------------|----------|------------|-----------|
| Years of research involvement | | | |
| 10 years & below | 0 (0.0%) | 14 (63.6%) | 8 (36.4%) |
| 11 years & above | 0 (0.0%) | 9 (56.2%) | 7 (43.8%) |

Table 2(a)

Top Management Support

| | Low | Moderate | High |
|-------------------------------|----------|-----------|------------|
| Years of research involvement | | | |
| 10 years & below | 0 (0.0%) | 4 (18.2%) | 18 (81.8%) |
| 11 years & above | 0 (0.0%) | 7 (43.8%) | 9 (56.2%) |

Table 2(b)

Organizational Rewards

| | Low | Moderate | High |
|-------------------------------|-----------|------------|-----------|
| Years of research involvement | | | |
| 10 years & below | 6 (27.3%) | 14 (63.6%) | 2 (9.1%) |
| 11 years & above | 4 (25.0%) | 9 (56.3%) | 3 (18.7%) |

Table 2(c)

Organizational Culture

| | Low | Moderate | High |
|-------------------------------|----------|-----------|------------|
| Years of research involvement | | | |
| 10 years & below | 2 (9.1%) | 8 (36.4%) | 12 (54.5%) |
| 11 years & above | 0 (0.0%) | 5 (31.3%) | 11 (68.7%) |

Table 2 portrays on the Organizational Factors in knowledge sharing applications among the academicians in UKM. It can be seen from the table, both academicians with 10 years of research involvement and below (63.6%) and with 11 years of research involvement and above (56.2%), are moderately agreed in organizational factors in knowledge sharing application among academicians.

Table 2(a), 2(b) and 2(c) above describe on the top management support, organizational rewards and organizational culture elements under Organizational Factors, with respect, in knowledge sharing applications among academicians. From the data, both academicians with 10 years of research involvement and below (81.8%) and academicians with 11 years of research involvement and above (56.2%) agreed that top management support have a high influence on knowledge sharing between academicians. However, academicians with 10 years of research involvement and below (27.3%) and academicians with 11 years of research involvement and above (25.0%) hardly agree that organizational rewards are not a major factor in knowledge sharing in UKM, but organizational culture is highly considered as a main factor of knowledge sharing as believed by academicians with 10 years of research involvement and below (54.5%) and academicians with 11 years of research involvement and above (68.7%).

These findings in general show that academicians with 10 years of research involvement and below as well as with 11 years of research involvement and above are moderately agree that top management support and organizational culture are important elements in knowledge sharing but it contrary to organizational rewards. It is an indicator that regardless of research involvement, top management in UKM is very much uplifting and supporting in knowledge sharing among academicians, delivers most of the necessary facilities needed, and is satisfied with the sharing exercises (Mat et al., 2016). It is also similar with the organizational culture

in regards to academician's research involvement, which reflects top management's encouragements for academicians to involve in seminars, workshops and stresses the importance of knowledge sharing between academicians (Mat et al, 2021). However, lack of belief in organizational rewards as an important factor in knowledge sharing among academicians shows that academicians regardless of research involvement lack of material rewards such as job advancements and receiving higher financial bonus, but sufficient and satisfied with the non-material remunerations such as salutations acknowledgements and positive reputations (Mat et al, 2016).

Technological Factor (System Infrastructure and System Quality)

Table 3

Technological Factor

| | Low | Moderate | High |
|-------------------------------|-----------|-----------|------------|
| Years of research involvement | | | |
| 10 years & below | 2 (9.1%) | 6 (27.2%) | 14 (63.7%) |
| 11 years & above | 2 (12.5%) | 4 (25.0%) | 10 (62.5%) |

Table 3(a)

System Infrastructure

| | Low | Moderate | High |
|-------------------------------|-----------|------------|------------|
| Years of research involvement | | | |
| 10 years & below | 2 (9.1%) | 4 (18.2%) | 16 (72.7%) |
| 11 years & above | 2 (12.5%) | 5 (31.25%) | 9 (56.25%) |

Table 3(b)

System Quality

| | Low | Moderate | High |
|-------------------------------|-----------|------------|------------|
| Years of research involvement | | | |
| 10 years & below | 2 (9.1%) | 12 (54.5%) | 8 (36.4%) |
| 11 years & above | 2 (12.5%) | 7 (43.75%) | 7 (43.75%) |

Table 3 explains on the Technological Factors in knowledge sharing applications among the academicians. As shown, both academicians with 10 years of research involvement and below (63.7%) and with 11 years of research involvement and above (62.5%), strongly approved in Technological Factors in knowledge sharing application among academicians in UKM.

Table 3(a) and 3(b) above displays the system infrastructure and system quality aspects under Technological Factors, correspondingly, in knowledge sharing applications among academicians. From the data, majority of academicians with 11 years of research involvement and above (56.2%) highly believed that system infrastructure is an important factor in knowledge sharing while 9.1% of academicians with 10 years of research involvement and below think otherwise. However, just less than half of academicians with 11 years of research involvement and above (43.75%) believed that system quality is major factor in knowledge sharing but 54.5% of academicians with 10 years of research involvement and below moderately trust in it.

These findings in general show us that the system infrastructure in UKM for knowledge sharing is slightly elevated where there are empathetic systems available such as an online system that helps academicians of both research involvement groups to engage in learning and teaching between each other. Moderate belief in system quality from academicians with different research involvement experience as a major factor in knowledge sharing shows that it can still be enhanced in terms of its applicability, precision, up to date, reliance and easier approach. The applications developed in the system infrastructure are substantial in making knowledge sharing process a realization. At the same time, UKM need to safeguard that the systems established are more responsible and approachable to all academicians (Mat et al, 2017, Mat et al, 2021).

Individual Factors (Trust, Knowledge Self-Efficacy and Reciprocal Benefits)

Table 4

Individual Factors

| | Low | Moderate | High |
|-------------------------------|----------|------------|------------|
| Years of research involvement | | | |
| 10 years & below | 0 (0.0%) | 10 (45.5%) | 12 (54.5%) |
| 11 years & above | 0 (0.0%) | 7 (43.7%) | 9 (56.3%) |

Table 4(a)

Trust

| | Low | Moderate | High |
|-------------------------------|----------|------------|------------|
| Years of research involvement | | | |
| 10 years & below | 0 (0.0%) | 10 (45.5%) | 12 (54.5%) |
| 11 years & above | 0 (0.0%) | 8 (50.0%) | 8 (50.0%) |

Table 4(b)

Knowledge Self-Efficacy

| | Low | Moderate | High |
|-------------------------------|----------|------------|-------------|
| Years of research involvement | | | |
| 10 years & below | 0 (0.0%) | 8 (36.3%) | 14 (63.7%) |
| 11 years & above | 0 (0.0%) | 5 (31.25%) | 11 (68.75%) |

Table 4(c)

Reciprocal Benefits

| | Low | Moderate | High |
|-------------------------------|---------|-----------|------------|
| Years of research involvement | | | |
| 10 years & below | 0 (0.0) | 7 (31.8%) | 15 (68.2%) |
| 11 years & above | 0 (0.0) | 4 (25.0%) | 12 (75.0%) |

Table 4 designates on the Individual Factors in knowledge sharing applications among the academicians in UKM. As shown, both academicians with 10 years of research involvement and below (54.5%) and with 11 years of research involvement and above (56.3%), strongly agreed in Individual Factors in knowledge sharing application among academicians.

Table 4(a), 4(b) and 4(c) above explain on the trust, knowledge self-efficacy and reciprocal benefits aspects under Individual Factors, correspondingly, in knowledge sharing applications among academicians in UKM. Academicians with 10 years of research involvement and below (54.5%) and academicians with 11 years of research involvement and above (more than 50%) believed that trust is an important factor (moderate and highly agreed) in knowledge sharing while academicians with 10 years of research involvement and below (63.7%) and academicians with 11 years of research involvement and above (68.75%) highly agree that knowledge self-efficacy is also a chief factor in knowledge sharing. As for reciprocal benefits of knowledge sharing, academicians with 10 years of research involvement and below (68.2%) and academicians with 11 years of research involvement and above (75.0%) highly trusted that it is an impelling factor in knowledge sharing as agreed in (Mat et al., 2019).

The results above shows that knowledge sharing practices among academicians regardless of research involvement experience in UKM are sturdily related with the individual factors of "Trust", "Knowledge Self-efficacy" and "Reciprocal Benefit". Thus, every academician should acquire all the three aspects of "Trust", "Knowledge Self-efficacy" and "Reciprocal Benefit"; to improve knowledge sharing practice (Mat et al., 2016b, Mat et al., 2021).

Conclusions

From the data elaborated, this study in general shows that both academicians with 11 years of research involvement and above and academicians with 10 years of research involvement and below, strongly convinced that Individual Factors are the main factors in knowledge sharing applications among academicians. Both groups of academicians also strongly believe in knowledge self-efficacy factor under the Individual Factors in knowledge sharing solicitations among academicians. They are also in agreement when it comes to Technological Factor and believed that it is an imperative aspect in knowledge sharing among academicians, as well as solidly belief in the system quality from both academicians of different research involvement experience reflects on the opportunities for progress that can still be completed. As for Organizational Factors in knowledge sharing, both group of academicians in this study count on the top management support and organizational culture are serious features in knowledge sharing but it is a different case with organizational rewards. Their moderate belief in organizational rewards demonstrates that academician regardless of research involvement absence of material rewards for instance, job promotions and higher fiscal bonuses.

Thus, this study supplies to a deeper theoretical understanding of how several elements impacting knowledge sharing, specifically the individual factor, technological factor as well as organizational factor responds towards the academicians' research involvement experience in term of their years of involvement. In term of circumstantial contribution, when relating these different group of academicians based on their research involvement experience, the results has exposed that regardless of their research involvement experiences, their agreement seems to tie on each factor. This brings the role that the factors which supposed moderate in knowledge sharing applications for example system quality and organizational rewards spread through both group of academicians consistently.

Therefore, in order for knowledge sharing applications to run efficiently, the university has to expand their system quality, organizational rewards and uphold other factors at its existing level. All in all, this paper will generally provide great contribution towards understanding the

relations of years of research involvement on knowledge sharing based on the three factors elaborated above and how can universities utilize it for their future advancements.

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