

KNOWLEDGE SHARING BEHAVIOUR AMONG ACADEMIC STAFF AT A PUBLIC HIGHER EDUCATION INSTITUTION IN MALAYSIA: HOW WILLING ARE THEY?

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Abstract: *The aim of this paper is to examine the knowledge sharing behaviour among academic staff at a Public Higher Education Institution (HEI) in Malaysia. The main objectives of this study are; to identify the components that influence knowledge sharing behaviour among academic staff and to investigate the relationship between attitude, subjective norm, and perceived behavioural control with knowledge sharing behaviour. A total of 200 questionnaires were used for statistical analysis. The results from a quantitative cross-sectional study indicated that attitude, normative norm and perceived behavioural control were found to have significant effect on knowledge sharing behaviour of academic staff. In contrast, comply norm was not significant on knowledge sharing behaviour. The findings were discussed and recommendations for the future research were also addressed.*

Keywords: *Attitude, Knowledge sharing behaviour, subjective norm, perceived behavioural control.*

INTRODUCTION

In today's knowledge-based economy, an organization's ability to strategically leverage knowledge has become a crucial factor for global competitiveness (Zboralski, 2009). Consequently, the ability of individual within the organization to share knowledge is a critical contributing factor for organizational competitiveness and there is a need to study what are the factors that can influence individual knowledge sharing behaviour in organization. According to Nonaka (1991) knowledge is a source of lasting competitive advantage. Therefore, managing

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knowledge has become an important agenda for most organizations (Pangil, 2007) and the theoretical basis for this phenomenon known as the knowledge-based view of the firm (Kogut & Zander, 1992). Knowledge-based view of the firm evolves from the resource-based view. Based on the resource-based view of the firm, a knowledge-based theory of the firm has emerged in the field of strategic management (Barney, 1991).

According to Bock and Kim (2002), many people believed that strategic management of knowledge resources as one of the key factors for sustainable competitive advantages. Even though knowledge has always been an important factor in organizations, only in the last decade it has been considered as the primary source of competitive advantage (Ipe, 2003).

Basically, knowledge sharing is an important part of knowledge management (Ipe, 2003; Soule, 2003; Danter, 2005; Ibrahim, Ismail, Asree, & Said, 2006). Thus, many organizations have realized that effective knowledge sharing is crucial to improve their core competencies. Therefore, it is important for organizations to obtain new knowledge, find ways to preserve the knowledge that the organization already has and looking for ways to support knowledge sharing among employees. Perhaps the most important of all is to leverage the knowledge to a bigger extent for the benefits of the firm stakeholders.

Knowledge sharing occurs at the individual and organizational levels. For individual employees, knowledge sharing involves talking to colleagues to help them get something done better, more quickly, or more efficiently. For an organization, knowledge sharing in the form of capturing, organizing, reusing and transferring experience-based knowledge that resides within the organization and making that knowledge available to others in the business. However, this study only concerns with knowledge sharing from individual level perspectives. This study attempts to examine what factors correlated with academic staff towards knowledge sharing behaviour.

The main aim of this study is to investigate the knowledge sharing behaviour of academic staff in one of the leading public higher institutions in Malaysia. What behaviour or factors have significant relationships towards knowledge sharing? Are all the three factors; attitude, subjective norm, and perceived behavioural control significant to the knowledge sharing behaviour? This is important because it is vital to explain accurately the knowledge sharing behaviour of individual academic groups. Identification of factors that motivate employees to share knowledge for the benefit of other employees and the firm is regard as a high priority issue for organizations (Chatzoglou & Vraimaki, 2009).

LITERATURE REVIEW

Knowledge is regarded as one of the few assets that will grow and become critical resources of firms and economies (Lam, 2000). As cited by Ipe (2003), Davenport and Prusak (1998), knowledge sharing is a process that involves exchanging knowledge among individuals and groups. On the other hand, Gao (2004), views knowledge sharing as 'a set of behaviours that involve the exchange of information or assistance to others which is separate from information sharing that normally involves management disseminating information of the organization to employees but, knowledge sharing on the other hand contains an element of reciprocity, information sharing can be unidirectional and unrequested.'

Alavi and Leidner (2001) compared knowledge sharing to knowledge transfer and defined it as the process of disseminating knowledge throughout the organization. The dissemination can happen between individuals, groups, or organizations using any type or number of communication channels. However, there is no standard definition of knowledge sharing and many researchers defined knowledge sharing from their individual point of view. Some considered and use knowledge sharing, knowledge flows, and knowledge transfer interchangeably. For this study, knowledge sharing is considered as a process of interaction and exchangeable information between knowledge workers all through the organization.

The aims of knowledge sharing are to do something of use with knowledge and to enhance it that can be in two forms. Firstly, is to handle existing knowledge, such as developing knowledge repositories (memos, reports, articles, etc.), knowledge compilation, and others. Secondly is to handle knowledge-specific activities such as knowledge acquisitions, creation, distribution, communication, sharing, and application (Setiarso, 2006 as cited from Stenmark, 2001). Consequently, knowledge sharing is to be one of the most important processes for knowledge management and organization (Bock & Kim, 2002) because it provides a link between individuals and the organization by disseminating the knowledge. By definition, knowledge sharing is the process of exploiting existing knowledge, identifying existing and accessible knowledge as to facilitate, transfer and application of knowledge to solve specific tasks better (Christensen, 2007 as cited in Ng, 2008). Furthermore, behaviour is defined as an individual's observable response in a certain situation with respect to a given target (Bagozzi, 1992).

Knowledge sharing attitude is identified by its direct effect on the knowledge sharing in the research model, attitude is formed from a combination of people's beliefs about behavioural outcomes and their evaluations of those outcomes (Sparks & Shepherd, 1992; Chennamaneni, 2006). A behavioural belief refers to an individual's idea that the behaviour will lead to a certain outcome or consequences

(Randall & Gibson, 1991; Ajzen & Fishbein, 2005). The more positive perceived consequences of behaviour, the more favourable the attitude towards performing the behaviour. Hence, if a person holds a negative attitude about behaviour, he or she will be less likely to take part in the behaviour compared to one who has a positive attitude about the behaviour.

Subjective norm is the social component of Fishbein and Ajzen's model (Randall & Gibson, 1991) and is perceived as social pressure to engage or not to engage in behaviour (Ajzen, 1991). Subjective norm is defined as having similar origins in a combination of people's perceptions that others think they should or should not perform the behaviour and their motivation to conform to other's desires (Randall & Gibson, 1991; Sparks & Shepherd, 1992).

Perceived Behavioural Control (PBC) refers to people's perceptions of their ability to perform a given behaviour (Ajzen, 1991). On the other hand, Roberts (2008) defined PBC as a person's appraisal of his or her ability to perform behaviour or barriers, which prevent one from performing the behaviour. Additionally, Randall and Gibson (1991) defined PBC as the person's belief as to how easy or difficult performance of the behaviour is likely to be. In summary, PBC is defined as an individual's perceived ease or difficulty of performing the certain behaviour. It is assumed to reflect past experience as well as anticipated obstacles (Randall & Gibson, 1991). The theory predicts that the greater the PBC, the more likely individuals to perform the behaviour.

METHODOLOGY

A structured questionnaire survey was undertaken to explore the factors of knowledge sharing behaviour among academic staff in one of the public higher education institutions in Malaysia. Four faculties in the University were identified and a total of 400 questionnaires were randomly distributed using a stratified random sampling method. A final total of 200 responses were received from the academic staff with a response rate of 50 percent.

The questionnaire of this study comprised of two main sections and took approximately 10 to 15 minutes to be completed. Section A comprised 21 items based on literature review. The majority of the instruments were adopted from Bock et al., (2005) which represented four (4) variables. Every question on section A comprised the dimensions that were aim to test the variables constructed. This section was further divided into four subsections: knowledge sharing behaviour (KSB), attitude (ATT), subjective norms (SN) and perceived behavioural control (PBC). The scale used in this study was Likert 5-point scale. This scale applied for all the items in Section A.

Questionnaire on KSB was measured by using 7 items ranging from 1 very infrequently to 5 very frequently to determine the degree to which respondents actually shares knowledge with other members of his or her organization. Attitude, subjective norm, perceived behavioural control were measured using 14 items questionnaire ranging from 1 strongly disagree to 5 strongly agree. The respondents were asked to indicate their agreement which measure attitude or specific behaviour towards knowledge sharing. Besides, the respondents also were asked to measure subjective norm, which look at beliefs about perceived social pressure from important referent group either will perform or not to perform a specified behaviour as well as to measure perceived behavioural control which is expected to influence the knowledge sharing behaviours, especially when there is an agreement between individual's perceptions of behaviour control and the actual control. The second section of questionnaire, Section B consists of the demographic background of the respondents. The demographic data captured information about designation, area of specialization, academic appointment, gender, age, and working experiences.

RESULT

The data were analysed using the SPSS program and descriptive statistics were run to identify the sample profile. Responses were received from 200 academic staff. Of these respondents, majority of participants come from female respondents with 126 persons (63.0%) compared to male with only 74 persons (37.0%). The data revealed 30.0% of the respondents belong to the age group of 46-50 years. The lowest percentage came from age range of 55 years old and above with only 6 persons (3.0%). Most of the academic staff were employed full time (98.5%) or 197 persons and only 3 (1.5%) of them are contract workers. In terms of respondents' designation, majority if the respondents with 83 persons (41.5%) were lecturers, 57 (28.5%) of the respondents were associate professor, 46 persons (23.0%) were senior lecturer and 14 persons (7.0%) were professors. Additionally, 25 out of 200 respondents (12.5%) had working life experienced less than 5 years, 56 persons (28.0%) had worked between 5 to 10 years, 14 persons (7.0%) had working experience between 11 to 15 years, 25 persons (12.5%) with 16 to 20 years of working experiences and over a quarter of respondents (40.0%) or 80 persons had working experienced more than 20 years.

A principal component of factor analysis test was conducted for 21 items representing four (4) variables. The results indicated that independent variables consisted of seven dimensions. The factor loadings of seven dimensions range from .57 to .86. For attitude (ATT), there are five items ranging from .49 to .95. However, factor subjective norm with five items resulted in 2 factors loading. Therefore,

factor SN was subsequently renamed and labelled as normative norm (NN) and comply norm (CN) for further analysis. Factor loadings of perceived behavioural control (PBC) with four items range from .81 to .87. Consequently, findings of this study highlighted two (2) components derived from subjective norm. Therefore discussion on relationship of knowledge sharing behaviour among academic staff will be using five (5) variables instead of four (4) variables.

Table 1 shows the inter-correlations coefficients (r) among variables. As shown in table 1, all the correlation coefficients were statistically significant with weak to moderate correlation. The highest correlation is ($r = 0.56, p < 0.01$), that is, between attitude and knowledge sharing behaviour, while the weakest correlation is ($r = 0.19$) between comply norm and normative norm. The correlation between attitude and comply norm presents weak association ($r = 0.27, p < 0.05$).

Table 1
Correlation of Variables

	<i>Attitude</i>	<i>Comply Norm</i>	<i>Normative Norm</i>	<i>Perceived Behavioral Control</i>	<i>Knowledge Sharing Behavior</i>
Attitude	1.00				
Comply Norm	0.27**	1.00			
Normative Norm	0.36**	0.19**	1.00		
Perceived Behavioral Control	0.42**	0.21**	0.31**	1.00	
Knowledge Sharing Behavior	0.56**	0.20**	0.41**	0.42**	1.00

Moreover, the correlation between attitude and normative norm ($r = 0.36$) as well as correlation between attitude and perceived behavioural control ($r = 0.42$) denotes moderate relationship respectively. In addition, correlation between comply norm and normative norm ($r = 0.19$), comply norm and perceived behavioural control ($r = 0.21$), and correlation between normative norm and perceived behavioural control ($r = 0.31$) shows weak relationship.

For the association correlation between independent variables and dependent variable, all the variables show moderate results with attitude ($r=0.56$), normative norm ($r=0.41$) and perceived behavioural control ($r = 0.42$) on knowledge sharing behaviour except for comply norm ($r = 0.20$). Therefore, independent variables of attitude, normative norm and perceived behavioural control had a similar value of coefficient that range from ($r = 0.41$ to $r = 0.56$) which means that these independent variables were moderately correlated with knowledge sharing behaviour. However, correlation of comply norm with knowledge sharing behaviour was found to be weak.

Meanwhile, the correlations between variables that consist of independent variables (attitude, comply norm, normative norm and perceived behavioural control) and dependent variable (knowledge sharing behaviour) have positive relationship. For instance, if an attitude shows increases of value, then the value of knowledge sharing behaviour also will increase and vice versa. The example of positive correlation is similar to other variables.

The independent variables used in the regression analysis were derived from factor analysis. Thus, four (4) independent variables were simultaneously regressed on knowledge sharing behaviour after all related assumptions have been tested and no violation was revealed. All statistical tests were carried out at a five percent level (0.05) of significance. Besides, these analyses were also performed to test the relationship construct in the knowledge sharing behaviour.

Table 2
Regression Analysis of Knowledge Sharing Behaviour

<i>Variables</i>	<i>Beta (β)</i>	<i>t</i>	<i>Sig.</i>
Attitude	0.41	6.32	0.000
Comply norm	0.01	0.17	0.869
Normative norm	0.20	3.31	0.001
Perceived behavioural Control	0.184	2.929	0.004

*P < 0.05 level

Table 2 represents the result of regression analysis on dependent variable and independent variables which are attitude, comply norm, normative norm and perceived behavioural control. The result revealed that 39.40 percent ($R^2 = 0.394$) of the variance in the knowledge sharing behaviour was explained by four (4) independent variables.

From the regression output, attitude ($\beta = 0.41$, $p = 0.000 < 0.05$), normative norm ($\beta = 0.20$, $p = 0.001 < 0.05$) and perceived behavioural control ($\beta = 0.18$, $p = 0.004 < 0.05$) were found to be highly significant. These variables had a strong positive impact on adding value to knowledge sharing behaviour. Comply norm ($\beta = 0.01$, $p = 0.87 > 0.05$), however, was found not significant.

DISCUSSION AND CONCLUSION

The research model used the identified cognitive predictors of knowledge sharing behaviour of academic staff. Results from the study showed the relationships between influencing factors towards academic staff application behaviour. Formerly, three (3) components of knowledge sharing behaviour; attitude, subjective norm and perceived behavioural control were correlated with each other as the theory predicts based on the previous studies. However, this study come out with four (4) components of knowledge sharing behaviour which are attitude, comply norm, normative norm and perceived behavioural control. Comply norm and normative norm were derived from subjective norm resulted from factor analysis. Therefore, it was found that normative norm had significant correlated whereas comply norm was not significant. Even though this norm were perceived as not being significant, comply norm did contribute positively to the success of knowledge sharing behaviour.

Second, among all the four independent variables that were simultaneously examined, attitude was found to be the most significantly predicted behaviour, in each case making attitude as an important variable when looking at behaviour of academic staff. This is also supported by Sohail and Daud (2009) research on knowledge sharing in Malaysia's higher education institutions that found staff attitude towards sharing knowledge have significant effect with knowledge sharing behaviour.

Components of subjective norm which is normative norm had significant impact on knowledge sharing behaviour except for comply norm. A possible explanation for this finding was perhaps University's top management do not support, promote, or motivate their academic staff to comply with the rules, regulation and decision but encourage the knowledge sharing behaviour through normative belief of academic staff. This result implies that academic staff does not consider top management and colleagues' decision due to lack of supportive environment. The results were consistent with previous study by Hagger, Chatzisarant is and Biddle (2002) that shows subjective norm did not influence children participation in physical activity. Furthermore, with regard to subjective norm, the path from subjective norm also failed to achieve significant in the study by Shih and Fang (2004) on internet banking behaviour in Taiwan. For normative

norm, however academic staff believes that management and peer group expectations of knowledge sharing to be important. This finding is consistent with the previous studies indicated that subjective norm has significant relationship with behaviour (Ajzen, 1991; Randall & Gibson, 1991; Sparks & Shepherd, 1992; Armitage & Conner, 2001; Hrubes, Ajzen & Daigle, 2001; Chennamaneni, 2006).

Next, the role of perceived behavioural control also has a direct impact or a significantly positive influence on knowledge sharing behaviour. Perceived behavioural control influences actual behaviour when there is an agreement between individual's perceptions of behaviour control and the actual control. For example, academic staff will be interested to engage in knowledge sharing behaviours if they have the time, resources, tools, and opportunities to do so. Prior research had shown that perceived behavioural construct increases the accounted variance in actual behaviour by 2 to 12 percent (Rivis & Sheeran, 2003; Armitage & Conner, 2001; Godin & Kok, 1996). This result implied that there should be tools and technology made available in the university to support knowledge sharing practices among academic staff.

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