

Knowledge Sharing: Nursing Ambience

U. Syed Aktharsha and H. Anisa

Abstract

The purpose of this paper is to examine the factors that promote or discourage knowledge sharing behaviour of nurses in the organizational context. Survey based instrument is used to gather the responses from nurses working in private hospitals in Tiruchirappalli district. 152 respondents participated in this survey. The results of PLS path analysis have demonstrated that intention and perceived behavioural control are significant predictors of knowledge sharing behaviour of nurses. Besides, attitudes, subjective norms, and perceived behavioural control were found to be significant predictors of knowledge sharing intention.

Key words:

Knowledge Management, Knowledge sharing, Knowledge based organizations.



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In the contemporary knowledge-intensive economy, knowledge is recognized as a critical strategic resource for the organizations (Nonaka and Takeuchi, [1995], Conner and Prahalad, [1996], Grant, [1996] Nahapiet and Ghoshal, [1998], and Pettigrew and Whip, [1993]). The knowledge-based perspective of the firm regards knowledge to be the source of firm's competitive advantage. Grant [1996], Spender [1996], and Liebeskind [1996] state that Knowledge, the researchers' content, is the source of competitive advantage because it signifies intangible assets that are unique, inimitable and non-substitutable. However, Alavi and Leidner (2001) observe that the source for competitive advantage resides not in the mere existence of knowledge at any given point of time, but rather in the organization's capability to effectively use the existing knowledge, to generate new knowledge assets and to act upon them. Davenport and Prusak, [1998], Alavi and Leidner, [2001], Osterloh et. al. [2000], and Zack [1999] stress that to leverage and manage organizational knowledge resources, organizations are adopting knowledge management (KM)

initiatives and are investing heavily in information and communication technologies in the form of knowledge management systems (KMS). Alavi and Leidner (1999) highlight that Knowledge management rallies around building the organization's ability to acquire, organize and diffuse the knowledge throughout the organization with the objective of improving its effectiveness, efficiency and competitiveness.

According to Nonaka and Takeuchi [1995], Alavi and Leidner [2001], a key enabler of knowledge management is *knowledge sharing*. Argote and Ingram [2000], Gold et al., [2001] indicate that many organizations assert is crucial to exploiting core competencies and to achieve sustained competitive advantage. Prahalad and Hamel (1990) observe that organization's core competencies reside in the collective learning of the organization be it production, marketing or technological capabilities, that are inimitable by the competitors. Bock and Kim [2002], Pan and Scarbrough, [1998], O'Dell and Grayson [1998], Osterloh et al. [2000] mention that to allow collective learning and to grow knowledge assets, an organization must develop an effective knowledge sharing process and encourage its employees and partners to share knowledge about customers, competitors, markets, products and so forth. Hansen, Nohria and Tierney [1999] mention two KM strategies that are commonly used by successful organizations to share knowledge: codification and personalization. Codification strategy presumes that knowledge can be disconnected from its source and as such deals with the capture and storage of knowledge representations in electronic repositories/databases, independent of the individual that generated it. The electronic repositories/databases which contain organizational knowledge facilitate knowledge transfer among the organizational members. For example, at the end of a project, a team may create best practices or lessons learned document based on their experiences of the project and store it in the repository. As part of the repository, this best practices or lessons learned document can be accessed by other teams resulting in the dissemination of knowledge across the organization. Personalization strategy, on the other hand presumes that knowledge cannot be disconnected from its source. Knowledge can be shared through person-to-person interactions. The interactions can be face-to-face with a shared context or mediated by technology as in email, instant messaging, text messaging, video conferencing, groupware etc.

While the role of technology in codification strategy is to capture the knowledge representation and store it in a computer, its role in personalization is to facilitate the communication of knowledge. Given the growth of distributed work and global teams, personalization through technology mediation is becoming increasingly important. Communication and collaborative tools and technologies are allowing temporarily and globally dispersed individuals to work together. Irrespective of the knowledge sharing strategy (codification versus personalization) adopted, technology is certainly making knowledge sharing a reality. Some of the tools and technologies that are commonly implemented to support knowledge sharing include Group Ware and Collaboration tools, Expertise "Yellow Pages" (computerized directory for locating experts having specific knowledge), Knowledge Repository (containing existing expertise, lessons learned, best practices etc), Intranets (including corporate portals), Email (listserv etc), Discussion forum (using tools like bulletin board, chat room etc), e-learning tools (interactive systems for learning), Desktop computer conferencing (using networked PC simultaneously for discussion and information exchange with tools such as net meeting, instant messaging, etc), Videoconferencing and Teleconferencing. (Ruggles, 1998; McDermott [1999], Orlikowski [1996], Cross and Baird [2000] highlighted that while tools and technologies are important for supporting knowledge sharing strategies, practical implementations have found that the mere availability of technology does not guarantee that knowledge will be shared. There is a lack of understanding of the factors that shape knowledge sharing behaviour in organizational context. The objective of this research study was to examine factors that promote or discourage knowledge sharing behaviours of knowledge workers in the organizational context.

Review of Literature

Bock, Zmud, Kim, and Lee (2005) examined factors that are believed to influence individuals' knowledge-sharing intentions. Researchers drew upon the Theory of Reasoned Action (TRA) (Ajzen and Fishbein 1980) for the study's theoretical framework. To this framework, they have added extrinsic motivators, social psychological forces and organizational climate factors. Using field survey of 154 managers from 27 Korean organizations, the researchers found that the attitude towards knowledge sharing along with the subjective norms and organizational climate influence

individual's intention to engage in knowledge sharing behaviour. Other findings of the study indicate that anticipated reciprocal relationships positively influence attitudes towards knowledge sharing while sense of self-worth and organizational climate influence subjective norms. A surprising finding of the study is that anticipated extrinsic rewards negatively influence the knowledge sharing behaviour. One of the limitations of this study is that while researchers examined the individual's intention to share knowledge, they did not examine the actual knowledge-sharing behaviour.

Connelly and Kelloway (2003) investigated a number of factors that impact employee's perceptions of a knowledge sharing culture. The identified factors can be broadly categorized into groups: organizational factors and individual factors. Organizational factors include individuals' perceptions regarding management support for knowledge sharing, their perceptions about a positive social interaction culture, organization's size, and the presence of technology that can facilitate knowledge sharing. Individual factors include age, gender and organizational tenure. The research findings suggest perceptions about management's support for knowledge sharing, and perceptions of a positive social interaction culture to be significant predictors of a positive knowledge sharing culture. Organizational size was negatively related to positive knowledge sharing culture such that smaller organizations were linked more with positive knowledge sharing culture. Lastly, gender was found to be significant moderator such that female participants needed more positive social interaction culture before they would perceive a knowledge sharing culture as positive in contrast to their male counterparts.

Using Nonaka's model and adapting a process oriented perspective, Lee et al., (2003) developed an integrative research model that interconnects knowledge management enablers and processes with organizational performance. The findings of the empirical examination of the model suggest that collaboration, trust, learning and centralization affect knowledge creation and sharing process. Researchers emphasize the significance of trust based culture for effective knowledge creation and note that organizations may have difficulty building a knowledge creating environment due to the lack of adequate culture in spite of their well built IT.

The importance of culture for effective KM is also highlighted by Janz et al (2003) theoretical model which explains the

relationships between knowledge related activities and organizational and individual characteristics that promote the creation and dissemination of knowledge throughout organization. Researchers note that knowledge flow in an organization depends on the trust in the organization as a whole as well as the specific individuals and suggest that organizations provide a climate of trust built on culture that encourages and provides incentives for sharing knowledge in all its manifestations such as learning, mentoring, collaboration, sharing ideas and stories etc.

Research Hypothesis

Knowledge sharing behaviour of knowledge worker is theorized to be collectively determined by his/her intention towards knowledge sharing and his/her perceived behavioural control. Knowledge sharing behaviour is the degree to which knowledge worker actually shares knowledge with other members of his/her organization. Intention measures knowledge worker's readiness to engage in knowledge sharing. Consistent with TPB, it is expected that favourable intention to share knowledge will lead to greater sharing of knowledge. Thus it is hypothesized that:

H1 - A higher level of intention towards knowledge sharing will lead to greater sharing of knowledge.

Perceived behavioural control (PBC) factors are dispositional factors that refer to the knowledge worker's beliefs about the perceived presence or absence of necessary resources and opportunities that may facilitate or impede knowledge sharing. PBC 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 greater the knowledge worker's belief that he/she possesses resources and opportunities, the fewer impediments he/she anticipates and as such has greater perceived control over the behaviour. Thus it is hypothesized that

H2 - A higher level of behavioural control towards knowledge sharing will lead to greater sharing of knowledge.

Attitude towards knowledge sharing is formed from behavioural beliefs and refers to the degree of positive/negative feelings an individual has towards the intention to share knowledge with other members of the organization. Higher attitudinal disposition towards knowledge sharing should increase knowledge sharing intention. Thus it is theorized that

H3- A more favourable attitude toward knowledge sharing will lead to greater intention to share knowledge.

Subjective norm is formed from normative beliefs and refers to the individual’s belief that important relevant others expect him/her to engage in behaviour of interest. In the organizational context, these relevant others include executive board, senior management, supervisor and the peer group. Industry surveys suggest that senior management drive knowledge management efforts. Management has control over employee compensation policies, performance appraisal and career advancement. As such, it is only natural that employees would want to comply with the management expectations of engaging in knowledge sharing behaviour. Similarly, peer group acceptance also has an important effect on one’s professional experience. Previously published research has shown subjective norm to be an important antecedent to behavioural intention (Bock, Zmud, Kim and Lee, 2005; Mathieson 1991; Taylor and Todd 1995; Thompson et al. 1991). Thus, it is proposed that employee’s normative beliefs about the management and peer group expectations have a positive effect on his/her intention to share knowledge.

H4 - A higher level of subjective norms towards knowledge sharing will lead to greater intention to share knowledge.

Perceived behavioural control is formed from control beliefs and refers to the individual’s beliefs about the perceived presence or absence of requisite resources and opportunities that may facilitate or impede knowledge sharing. The facilitating conditions for knowledge sharing include technical and non-technical supports such as the availability and ease of use of tools and technology, time, resources and so forth. TPB suggests that perceived behavioural control boosts intention because individuals are only motivated to undertake tasks at which they succeed. Taylor and Todd (1995) found perceived behavioural control to be a significant predictor of technology usage intentions. Thus it is theorized that

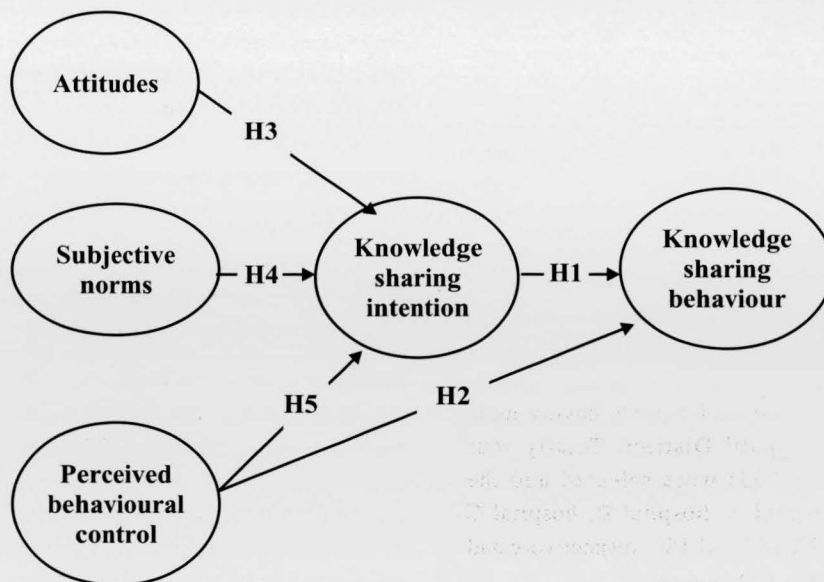
H5 - A higher level of behavioural control towards knowledge sharing will lead to greater intention to share knowledge.

The theoretical relationships presented in Hypotheses one to five are depicted in Figure 1.

Need for the Study

Bock et al. [2005], Connelly and Kelloway [2003] Ruggles [1998] indicated Knowledge sharing has been recognized as a positive force for the survival of an organization. Yet, the factors that promote or discourage knowledge sharing behaviour in the organizational context are poorly understood.

Graph 1: Proposed Research Model



Hall [2001], Smith and Farquhar [2000]; Prusak [1999], Boisot and Griffiths [1999] expressed that Identification of factors that motivate employees to share knowledge for the benefit of other employees and the firm is regarded as a high priority issue for organizations. While the factors that influence knowledge sharing behaviour of employees can be speculated, it is crucial that we carefully examine the underlying antecedents of knowledge sharing, if we really want to add value to the practitioners of knowledge sharing. To date, little empirical research exists on what environments and mechanisms are conducive to knowledge sharing. Andrews and Delahaye [2000], and Hinds and Pfeffer [2003] state that even much less empirical research exists on the deeper individual issues that shape individuals beliefs, attitudes, intentions, and behaviour in knowledge sharing. The studies of Bock et al. [2005] and Ryu et al., [2003] show some encouraging developments. However, even these studies did not measure explicitly employee's actual knowledge sharing behaviour. Citing the growing significance of knowledge sharing to the success of knowledge management and to organizational survival, several researchers have called for further investigation of the factors that shape knowledge sharing behaviour in the organizational context. Besides, there is a lack of understanding of the factors that shape knowledge sharing behaviour in organizational context.

Research Objectives

- a) To examine influence of attitude, subjective norms, perceived behavioural control on behavioural intention to share knowledge.
- b) To examine the impact of knowledge sharing intention and perceived behavioural control on knowledge sharing behaviour of nurses.
- c) To test and validate the proposed research model.

Research Methodology

Universe

The study was conducted in private hospitals having more than 225 beds in Tiruchirappalli District. Totally four hospitals having more 225 beds were selected and the population of nurses in hospital A, hospital B, hospital C and hospital D were 154, 173, 165 and 180 respectively and total population together were 672 nurses.

Determination of Sample size

A pilot study was conducted among 60 respondents and the standard deviation of the items was found to be 0.312. Hence the sample size was determined to be 152.* at the end of data collection period, as a percentage of sampling population, the response rate is 23 percent.

* The sample size $n = (Z * SD / e)^2$

Sampling Method

The population for this study consisted of all the nurses in four private hospitals of Thiruchirappalli district. The sample for the study was selected from the population by simple random sampling method.

Data Collection

Data were collected from both the primary and secondary sources. The questionnaire consists of two parts namely Part I and Part II. The part I contained seven questions on Demographic factors of users such as age, gender, educational qualifications, experience, department, designation and monthly income. Second part consists of the conceptual factors such as attitudes with five questions, subjective norms with five questions, perceived behavioural control with six questions, intention with six questions and knowledge sharing behaviour with six questions. The scaling values are seven - Very Extremely Agree; six - Highly Agree; five - Agree; four - Neutral; three - Disagree; two - Highly Disagree one - Very Extremely Disagree. Secondary data were obtained from Journals and Web portals. The study was conducted in private hospitals having more than 225 beds. In this basis, four hospitals were selected. A simple random sampling was done by selecting nurses randomly from the employee list of four selected hospitals.

Data Analysis

Reliability

Gaur and Gaur (2006) defined that reliability refers to the consistency of the measurement. That is the degree to which an instrument gives the same numeric value when the measurement is repeated under same conditions with same subjects. The study has used *Cronbach alpha coefficient* for assessing the reliability of the scale. Generally, according Nunnally (1978) Cronbach alpha level of 0.60 or above is considered to be acceptable for construct.

Table 1: Reliability Statistics

Dimensions	No. of items	Alpha value	Hotelling's t squared	F - value	d. f	P -value
Attitudes towards knowledge sharing	5	0.785	6.605	1.618	4,148	0.017
Subjective norms towards knowledge sharing	5	0.777	41.373	10.138	4,148	0.000
Perceived behavioural control towards knowledge sharing	6	0.825	75.914	14.781	5,147	0.000
Intention towards knowledge sharing	6	0.754	23.375	3.767	6,146	0.002
Knowledge sharing behaviour	6	0.722	10.170	1.980	5,147	0.035

Table 1 presents that all the constructs namely attitudes towards knowledge sharing, subjective norms towards knowledge sharing, perceived behavioural control towards knowledge sharing, intention towards knowledge sharing, knowledge sharing behaviour exhibit adequate reliability with internal consistency values of 0.785, 0.777, 0.825, 0.754 and 0.722 respectively which is greater than recommended alpha value of 0.60. Finally, the results of Hotelling's *T*-squared test confirmed that the mean of different items under the five dimensions was significantly different from each other at five percent level. This indicates that there is no equivalence between all the 28 items and they are different.

Validity

John Adam et al [2007] state that validity refers to the accuracy of the research instrument. That is, the measuring instrument used in this study actually measures the property it is supposed to measure. It is believed that validity is more important than reliability, because if an instrument does not accurately measure the property, it is supposed to measure; there is no reason to use it even if it measures consistently.

Convergent Validity

Convergent validity of all the constructs was examined using the measure of Average Variance Extracted (AVE) that is the average variance shared between a construct and its items Fornell and Larcker, [1981]. Chin [1995] and [1998], Chin et al [1999 and 2003] indicated that a construct with an AVE of over 0.5 is expected to have adequate convergent validity. In some cases, values up to 0.40 of AVE and 0.60 of composite reliability

are also considered to be acceptable if they are central to the model.

The Average Variance Extracted (AVE) of each of the study constructs is presented in Table 2. The AVE of each construct was over 0.40 and composite reliability of each contract was over 0.60. Therefore, convergent validity of the study constructs was verified.

Validation of Models through Partial Least Square –Path Modeling (PLS-PM)

In order to test the proposed Hypothesis, this study employed a construct level Correlation analysis as an initial verification. Visual PLS is used to compute the constructs scores. Using these constructs scores as a base, the study explored the relationship between the variables using SPSS package 16.0. The construct correlation has been presented in the table 3.

The correlation table indicates that there exists a positive relationship between knowledge sharing intention and knowledge sharing behaviour, perceived behavioural control and knowledge sharing behaviour, attitudes towards knowledge sharing and knowledge sharing intention, subjective norms towards knowledge sharing and knowledge sharing intention and finally, perceived behavioural control towards knowledge sharing and knowledge sharing intention with the R value of 0.772, 0.722, 0.722, 0.708, 0.780 respectively. The correlation coefficient for the above relationship is significant at 0.001 percent level.

Table 2: Convergent Validity

Dimensions	AVE value	Composite Reliability
Attitude towards Knowledge Sharing	0.532	0.850
Subjective Norms towards Knowledge Sharing	0.486	0.799
Perceived Behavioural Control	0.505	0.859
Intention Towards Knowledge Sharing	0.457	0.784
Knowledge Sharing Behaviour	0.503	0.876

Table 3. Construct Level Correlation of Model

Hypothesis	Independent variables	Dependent Variable	Pearson's Correlation	Significance level at 1 %
H1	Intention towards knowledge sharing	Knowledge sharing behaviour	0.772	0.000
H2	Perceive behaviour control towards knowledge sharing	Knowledge sharing behaviour	0.722	0.000
H3	Attitude towards knowledge sharing	Intention towards knowledge sharing	0.722	0.000
H4	Subjective Norms towards knowledge sharing	Intention towards knowledge sharing	0.708	0.000
H5	Perceive behaviour control towards knowledge sharing	Intention towards knowledge sharing	0.780	0.000

Staples et al (1998) indicate that through the bivariate correlation are significant between the construct, it is still needed to assess the path coefficient in the structural model as a causal effect Efron [1979], Efron and Gond [1983] express that in order to ensure that path coefficients are statistically significant, this study used a bootstrap and jack knife re-sampling procedures to estimate standard errors for calculating values using visual PLS. The results are examined and the t-statistic value at the 0.05 level is 1.96. If the t-statistic value is greater than 1.96, the path is significant.

As presented in figure 2 and table 4, the path linking knowledge sharing intention to knowledge sharing behaviour was found to be significant at 0.05 level ($\beta=0.533$ $t=6.3974$), indicating intention has a significant effect on knowledge sharing behaviour. It explained a variation of 63 percent in knowledge sharing behaviour. This supported for H1.

The path linking perceived behavioural control to knowledge sharing behaviour was significant at 0.05 level ($\beta=0.306$, $t=3.0501$), indicating perceived behavioural control has a significant effect on knowledge sharing behaviour. This provided support for H2.

The path linking attitudes towards knowledge sharing to knowledge sharing intention was found to be significant at 0.05 level ($\beta=0.31$, $t=4.8615$), indicating attitudes has a significant effect on knowledge sharing intention. This provided support for H3.

The path linking subjective norms to knowledge sharing intention was not significant at 0.05 level ($\beta=0.107$, $t=1.5609$), indicating subjective norms has no significant effect on knowledge sharing intention but the correlation between these two dimensions was significant. This did not provide support for H4.

Graph 2: Structural Equation Results of Model

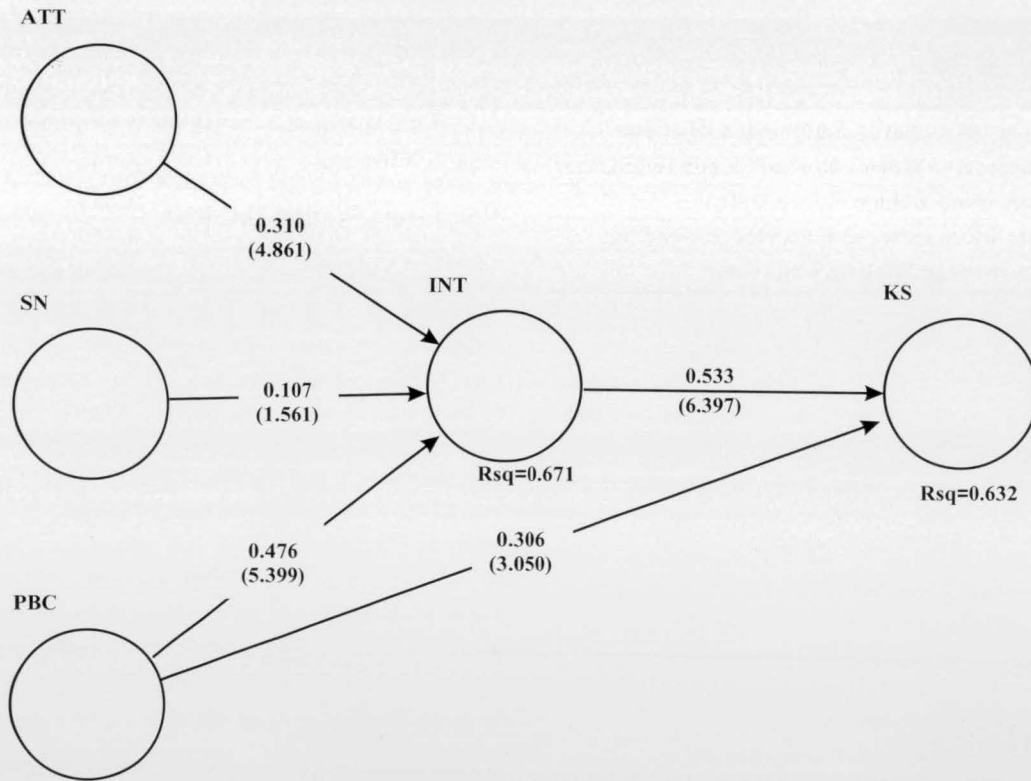


Table 4 : Bootstrap Summary of Model and Hypothesis Result

Hypothesis	Entire sample estimate	Mean of sub sample	Standard error	t-Statistic	R square value	Result
H1	0.533	0.5463	0.0833	6.3974	0.632	significant
H2	0.306	0.3022	0.1003	3.0501		significant
H3	0.31	0.3223	0.0638	4.8615	0.671	significant
H4	0.107	0.1058	0.0685	1.5609		insignificant
H5	0.476	0.4802	0.0882	5.3989		significant

The path linking perceived behaviour control to knowledge sharing intention was found to be significant at 0.05 level (beta=0.476, t= 5.3989), indicating perceived behaviour control has a significant effect on knowledge sharing intention. The attitude towards knowledge sharing, subjective norm and perceived behavioural control collectively explained about 67 percent of the variance in the behavioural intention to share knowledge.

Discussions

Profile of Respondents

80 percent of the respondents in Hospitals were between the age group of 21-30 years. 90 percent of the respondents had an experience in nursing for less than 10 years. 70 of respondents were working in the department of ortho. About 45 percent of respondents were in cadre of ward nurses. About

68 percent of respondents were drawing salary between 10000 and 15000.

PLS Analysis Discussion

The objective of this research study was to enhance our collective understanding of the factors affecting knowledge sharing behaviour of knowledge workers. The results from the field survey of 152 nurses provide empirical support for the overall structure theorized in the research model. Of the five hypotheses, four were supported. The results indicate that the significant predictors of knowledge sharing behaviour are: intention towards knowledge sharing, attitude towards knowledge sharing, subjective norm towards knowledge sharing and perceived behavioural control towards knowledge sharing. These predictors explained about 67 percent of the variance in the behavioural intention to share knowledge and 63 percent variance in the actual knowledge sharing behaviour. The findings are a great improvement over previous studies on knowledge sharing behaviour (Bock and Kim, 2002; Bock et al., 2005; Ryu et al., 2003; Lin et al., 2004).

Knowledge Sharing Behaviour

The study theorized that knowledge sharing behaviour of knowledge workers is to be collectively determined by intention towards knowledge sharing and perceived behavioural control. As theorized, intention towards knowledge sharing and perceived behavioural control emerged as significant predictors of actual knowledge sharing behaviours. Intention towards knowledge sharing had a significant effect on knowledge sharing behaviour with a path coefficient of 0.53. Perceived behavioural control also had a substantial effect on knowledge sharing behaviour with a path coefficient of 0.30. Collectively, intentions towards knowledge sharing and perceived behavioural control explained about 63 percent of the variance in knowledge sharing behaviour.

The finding that intention towards knowledge sharing was positively and significantly related to knowledge sharing behaviour coincides with the findings of prior research on knowledge sharing using self-reported survey measures (Bock and Kim, 2002). However, while Bock and Kim's study explained only 1.6 percent of the variance in the knowledge sharing behaviour, this study explained about 63 percent of the variance in knowledge sharing behaviour.

The significant impact of perceived behavioural control on knowledge sharing behaviour in this study suggests that knowledge sharing is not largely under volitional control. Knowledge workers are inclined to engage in knowledge sharing behaviour to the extent they have the time, resources and opportunities to do so.

Knowledge Sharing Intention

The study hypothesized the predictors of knowledge sharing intention are to be: attitude towards knowledge sharing, subjective norm and perceived behavioural control. As hypothesized, attitude, subjective norm and perceived behavioural control emerged as significant predictors of intention towards knowledge sharing. These findings are consistent with the findings of prior TPB related research (Taylor and Todd, 1995; Mathieson, 1991; Bock and Kim, 2002; Bock et al., 2005; Ryu et al., 2003; Lin et al., 2004).

Attitudes towards knowledge sharing had a strong effect on the behavioural intention to share knowledge with a path coefficient of 0.31. The high contribution of attitude towards knowledge sharing suggests that knowledge workers with favourable attitudinal disposition are more likely to engage in knowledge sharing.

The subjective norms towards knowledge sharing did not have much impact on knowledge sharing intention with a path coefficient of 0.10. So, the non-significance of subjective norm implies that knowledge workers do not consider management and peer group expectations of knowledge sharing to be important. Knowledge workers are not likely to engage in knowledge sharing when they perceive that their management and peer group value knowledge sharing and are likely to applaud the behaviour.

The perceived behavioural control towards knowledge sharing had a strong effect on the behavioural intention to share knowledge with a path coefficient of 0.47. The impact of perceived behavioural control on the intention towards knowledge sharing indicates that knowledge workers are motivated to engage in knowledge sharing to the extent they believe they have the time, resources and opportunities to do so. Collectively, the attitudes towards knowledge sharing, subjective norms and perceived behavioural control explained about 67 percent of the variance in the behavioural intention to share knowledge.

Implications for Practice

From a pragmatic perspective, the results of the study have many implications for hospitals initiating or striving to promote knowledge sharing behaviours of their Knowledge workers i.e. nurses. First, prior to launching knowledge sharing initiatives, hospitals should create an environment that is conducive to knowledge sharing. Hospitals should develop and nurture cultural norms, practices and processes that build trust, collective cooperation and positive social interactions among knowledge workers. Work context exemplified by high levels of trust, collective cooperation, formal and informal networks facilitate knowledge exchanges among nurses.

Second, hospital management should demonstrate its support for knowledge sharing. Supportive organizational climate and intensified management commitment towards knowledge sharing promotes knowledge sharing behaviours. The study findings indicate that nurses are likely to be influenced by the expectations of management and peer group in deciding to engage in knowledge sharing. So it may even be appropriate to exert some pressure on knowledge workers to share knowledge through the social influence of top management and peer group.

Third, the results of the study suggest that attitude towards knowledge sharing behaviour affects intention. Hospitals should promote knowledge sharing behaviours by managing factors that influence knowledge workers attitude towards knowledge sharing.

Fourth, Knowledge workers i.e. nurse's perceptions of the loss of knowledge power should be mitigated by reassuring their position, power and status in hospitals.

Fifth, hospital administration should reconsider knowledge sharing incentives based on economic incentives. Besides, management should ensure that nurses have time, resources and opportunities to engage in knowledge sharing. Organizations should allocate time for engaging in knowledge sharing behaviours by integrating it into the work processes. Time needed to engage in knowledge exchanges should not be viewed as a cost factor.

Limitations and Further Research

There are few limitations to this research study. First, the research setting for the current study was hospitals in a

particular district. Respondents were limited to nurses working in both day and night shift. As such, the study may limit the extent to which respondent behaviours can be generalized to the general work force. The results of this study can be regarded as being representative of the perceptions of the general knowledge work force. To further increase the generalizability however, future research should replicate the study's findings with larger samples and in different contexts.

Second, the research setting used in this study made it difficult to obtain objective measures of knowledge sharing behaviours. As such, the current study used perceptual measures. The survey instrument relied on self-reported measures, in which the findings are dependent upon knowledge worker's responses regarding his/her knowledge sharing behaviour rather than on direct observation of such behaviour. Self reports of behaviour are often criticized as being tainted with response bias, inaccuracy and so forth and as such are regarded as poor indicators of actual behaviour. Also, in the current study, the measures for knowledge sharing behaviour, although perceptual, are recorded using a seven point frequency scale which is believed to mitigate the bias associated with self reports. Nevertheless, future research should investigate the research model using objective measures for knowledge sharing behaviours to make the findings of this study more robust.

Third, the study focuses on some of the motivating factors that influence knowledge sharing behaviours of knowledge workers. As such, the antecedents explain only a portion of the variance in the dependent variable (actual knowledge sharing behaviour). There may be other factors which are not part of this study but may have significant influence on knowledge sharing behaviours. Future research should add other constructs such as self-efficacy, personality traits, leadership styles, trust, organizational commitment, perceived ownership of knowledge, task inter dependence etc to the research model to determine their influence on knowledge sharing behaviours.

Finally, the study's findings are based on the modest sample size of 152 respondents. Although PLS Graph handles small sample sizes and generates valid results, a larger sample with more statistical power would have permitted me to use other covariance based structural equation modelling tools such as LISREL. Future research should verify the findings of this research study using covariance based tools.

Conclusion

Knowledge sharing has been identified as the key enabler of knowledge management. To leverage knowledge resources and to support knowledge sharing, organizations are employing knowledge management systems. While knowledge management systems are important, practical implementations have shown that the mere availability of technology does not guarantee that knowledge will be shared. Citing the growing significance of knowledge sharing to the success of knowledge management and to the survival of organization, both academicians and practitioners have called for the identification of factors that promote or discourage knowledge sharing behaviours in the organizational context. Using a field survey of 152 nurses, the theoretical model was validated within the context of a single empirical study. The findings provided significant statistical support for the research model accounting for about 67 percent of the variance in the behavioural intention to share knowledge and 63 percent variance in the actual knowledge sharing behaviour. Four of the five hypothesized relationships were supported. Knowledge sharing behaviour was predicted by intention towards knowledge sharing and perceived behavioural control. Knowledge sharing intention in turn was predicted by attitude towards knowledge sharing, subjective norm and perceived behavioural control. Based on the findings, the study discussed theoretical and practical implications for sharing knowledge in the work context. Overall, the results of the study advance prior research in the area of knowledge sharing by shedding light on the determinants of knowledge sharing behaviour of nurses. The research model deepens our collective understanding of the underlying psychological processes that induce knowledge sharing behaviours. In addition to contributing to theory, the findings of the study also yield insights for practice. The insights could be used by healthcare organisations in developing realistic environments that are conducive to knowledge sharing.

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