Knowledge sharing acts as a significant antecedent to organizational commitment in a Confucian culture: A quantitative study of employees in the Hong Kong ICT industry

Anthony Wong Newcastle Graduate School of Business University of Newcastle Callaghan NSW, Australia Email: <u>awong@cfhc.caritas.edu.hk</u>

Canon Tong International Graduate School of Business University of South Australia Adelaide SA, Australia Email: <u>canon.tong@unisa.edu.au</u>

Joseph M Mula School of Accounting Economics & Finance University of Southern Queensland Toowoomba, Australia Email: mula@usq.edu.au

Abstract

Most studies in organizational commitment have been conducted in western cultures using the three-component model of Meyer and Allen (1991). Knowledge sharing has been identified as a key enabler in gaining competitiveness. It is especially important in the ICT industry where employees share information on rapidly changing technologies. Knowledge sharing and organizational commitment share similar characteristics in terms of organizational issues, human behavior and relations. This research examined the effect of knowledge sharing practices on organizational commitment in the Hong Kong ICT industry. The knowledge sharing practices model of De Vries, Van den Hoff and de Ridder (2006) and the five-component organizational commitment model of Wang (2004) that better explains Confucian culture, were adopted. Data was collected from 310 ICT professionals. Results indicate that Wang's model is more appropriate in describing employees' commitment. Knowledge sharing practices have significant and positive effects on all the five organizational commitment components in a Confucian culture.

Keywords

Knowledge sharing, organizational commitment, affective commitment, ICT, Confucian culture

INTRODUCTION

The purpose of this paper is to examine the effect of knowledge sharing practices on organizational commitment in the information and communication technology (ICT) industry. Because of rapidly changing technologies, employees in the ICT industry are required to continually acquire updated and advanced knowledge. Employees can update their knowledge personally but will also rely on formal training provided by their organizations. However, due to the extensive resources required in providing such training, companies need to encourage their employees to share the knowledge they have with their colleagues in order to benefit other employees as well as the organization itself. IT professionals will have a higher commitment to organizations and remain working in their organizations if their jobs are stimulating and challenging in nature and there are opportunities for advancement in the ICT industry (Bashir & Ramay, 2008). By considering these two important management issues, this research aimed to link the importance of knowledge sharing practices in the ICT industry to its positive effect on organizational commitment in Hong Kong's ICT industry.

The knowledge sharing practices model by De Vries, Van den Hoff and de Ridder (2006) and the fivecomponent organizational commitment model by Wang (2004) were used in this study. Knowledge sharing practices are defined as consisting of two activities: knowledge donating and knowledge collecting. The five

components of organizational commitment are affective commitment, active continuance commitment, passive continuance commitment, normative commitment, and value commitment.

Confucian culture in an organization means the ideology of harmony, scholars, gentlemen, or ritual management style (Cheung & Chan, 2008). Employees within a Confucian culture would like to share what they know and have higher commitment to their organizations because of the higher belief in unselfishness, keeping promise, justice and loyalty. China and Hong Kong are recognized as Confucian societies (Gao & Kim, 2009). In a work place, the dominance of Confucian ethics highly values harmony and welfare of an entire organization above the interests of individuals more than in western style organizations (Gao & Kim, 2009) in which the employees are more individualistic (Hofstede, 1998). Hong Kong was ruled by British for over 150 years before 1997 and has developed within a Western culture through frequent business and social interactions with the Western world. However, most of the citizens in Hong Kong are Chinese and have a traditional Chinese culture. This generates an interest as to whether Wang's (2004) model is appropriate in studying the commitment of employees in Hong Kong with a Confusion culture.

LITERATURE REVIEW

Organizational commitment is a continuous and challenging management concept for enhancing competitive advantage through organizational and human resource strategies. Organizational commitment models have been around for more than 40 years and are increasingly important in the modern business and management environments. Most studies of organizational commitment show that it affects employees' attitudes and behavior towards an organization, such as turnover intention, job satisfaction, job involvement, work experiences, and organizational citizenship behavior (Mathieu & Zajac, 1990; Porter, Steers, Mowday & Boulian, 1974). Those studies show that organizational commitment significantly enhances the performance of an organization and thus provides it with a competitive advantage.

Organizational Commitment Models

The organizational commitment model developed by Meyer and Allen (1991) effectively integrated the approaches by Becker (1960), Porter et al. (1974), and Mowday, Steers and Porter (1979) by including three components: (i) affective commitment, (ii) continuance commitment, and (ii) normative commitment. Affective commitment is a psychological aspect of an employee's willingness to commit to an organization. Continuance commitment is the cost of leaving an organization and normative commitment is concerned with the obligation of an employee to the organization. Since its development, their model was applied in a Western context (Hackett, Bycio and Hausdorf, 1994; Mayer and Schoorman, 1992) and some in a Chinese context (Chen and Francesco, 2003), it is not apparent whether they could be validly applied to the study of employee commitment in Hong Kong. This is the research gap that this study fills.

Wang's (2004) Model in a Chinese Context

Before developing her own model of organizational commitment, Wang (2004) examined a model developed by Ling et al. (2001) with components including affective commitment, normative commitment, ideal commitment, economic commitment and choice commitment and the active and passive approaches by Takao (1998, cited in Wang, 2004). She found that economic and choice commitments by Ling et al. (2001) were similar to the personal sacrifices and employment alternative of continuance commitment defined by western researchers. Wang (2004) integrated ideas from McGee and Ford (1987) concerning the two scales of continuance commitment and CC-loalt for low alternative of employment in other companies as the active continuance commitment, as well as ideas from Takao (1998) concerning passive approaches, and traditional affective commitment and normative commitment, she developed her own approach to measuring the active and passive subscales of continuance commitments with a model of five components. The five components are: (i) normative, (ii) value, (iii) affective, (iv) active, and (v) passive continuance.

Asian countries, especially China, have been classified as having a dominant high collectivistic culture where employees are more loyal to the organization. Employees are less afraid of losing benefits but look for more opportunities in personal development when considering whether or not to stay with the organization (Hofstede, 1998). Value commitment, although not included in Meyer and Allen's (1991) model, was not a new idea by Wang (2004) as it had been first suggested by Angle and Perry (1981) and further elaborated by Mayer and Schoorman (1992) concerned employees' support of organizational goals and their belief in and acceptance of those goals. Wang (2004) had a similar interpretation of value commitment in a Chinese environment believing

that the harmonious and loyal nature of Chinese people meant that they are more likely to follow and accept organizational goals in order to maintain stable employer-employee relationships.

Wang (2004) conducted a confirmatory factor analysis to test the appropriateness of her model as well as models from other researchers. The results showed that her five-component model was best suited to the data collected in her studies of both state-owned and foreign-investment enterprises in China than the models by Meyer and Allen (1991) and Ling et al. (2001). However, as this contradicts findings from Cheng and Stockdate (2003) and Chen and Francesco (2003) that a three-component model is better suited to studying organizational commitment in a Chinese cultural environment, it is meaningful to undertake further research.

Knowledge Sharing Practices

Because of the abstract characteristic of knowledge, sharing of knowledge is a process which requires special behavioral support from employees. Sharing of knowledge implies interactions between individuals with agreed and acceptable behavior. Studying knowledge sharing processes and their relationships with behavioral issues are therefore significant (Nonaka, 1991).

Knowledge can be classified into tacit knowledge and explicit knowledge (Nonaka, 1991). Explicit knowledge can be expressed in words and numbers and can be transferred and shared in terms of text, formulas and any other physical means. It can be shared with others in a more systematic and formal way (Nonaka & Konno, 1998). Tacit knowledge is personal and based on experiences, values and beliefs. It cannot be expressed in words and is hard to be represented by formulas and communicated. Tacit knowledge is generated from instinct and cannot be clearly described and expressed. The technical element of tacit knowledge is one's techniques in doing something. Both meanings of tacit knowledge imply that sharing of tacit knowledge requires special environments and conditions.

Van den Hooff and Van Weenen (2004) and De Vries et al. (2006) found that knowledge sharing practices can be separated into two processes: knowledge donating and knowledge collecting. Donating knowledge involves an individual giving other employees his or her intellectual capital, whilst knowledge collecting involves an individual consulting other employees for the purpose of collecting intellectual capital. Effective promotion of knowledge sharing practices in an organization requires changing employees' attitudes and behavior toward the willingness to donate and collect knowledge. A properly established environment that motivates employees to donate and collect knowledge between employees requires a close relationship and trust between employees (Koskinen, 2003).

Knowledge Sharing as an Antecedent of Organizational Commitment

Individuals should have the intention and willingness to share their knowledge with others and receivers should have the ability to absorb the knowledge so that it becomes their own knowledge. Employees who are well supported by their organizations are more likely to reciprocate by performing better and presenting a good attitude towards sharing knowledge. If good organizational citizenship behavior is considered as having a positive relationship with organizational commitment, knowledge sharing practices might be considered as a significant predictor for enhancing organizational commitment (Chen & Francesco, 2003; Labatmediene, Endriulaitiene & Gustainiene, 2007; Mathieu & Zajac, 1990; Porter et al., 1974).

Boer, van Baalen and Kumar (2002) contended that knowledge sharing is fundamentally a social issue in an organization. They argued that knowledge sharing exists between individuals with a good social relationship. Results from research by Li, Ardichvili, Maurer, Wentling and Stuedemann (2007) indicate that knowledge sharing is strong within groups but weak in an organization's general community. These in-group communities are usually informal social networks in an organization and are treated as equally important as formal networks in terms of influencing employees' knowledge sharing intentions (Bosua & Scheepers, 2007).

O'Neill and Adya (2007) contended that among Chinese employees who traditionally place more emphasis on harmony and altruism, there is a strong willingness to share knowledge within a group. This supports the work of Wasko and Faraj (2005) who found that if knowledge sharing is accepted as good practice among employees out of a sense of obligation and community interest, they would have a stronger moral obligation towards the organization as a whole. It would therefore be reasonable to hypothesis that employees whose organizations commonly practice knowledge sharing have a greater commitment towards their organization.

There is a dearth of studies on organizational commitment even though it is recognized as one of the most important management issues for gaining competitive advantage. Organizational commitment and knowledge 20th Australasian Conference on Information Systems

2-4 Dec 2009, Melbourne

sharing have similar characteristics as both of them consider attitudinal and behavioral aspects of employees as well as the interaction between peers in an organization and the generation of organizational performance for gaining competitive advantages. The characteristics of the antecedents in forming employees' attitudes and behavior for organizational commitment and whether knowledge sharing has these features were examined in this study.

Based on the idea that employees in the ICT industry whose organizations encourage knowledge sharing practices have a higher level of commitment, the following overarching question was proposed for this study in order to fill a gap in the literature: "What is the relationship between knowledge sharing practices and organizational commitment in Hong Kong's ICT industry?" The answer to the question is intended to indicate whether or not knowledge sharing practices play a significant role in the promotion of organizational commitment in Hong Kong's ICT industry.

Dependent Constructs

The five components of Wang's (2004) organizational commitment model were used as the dependent constructs in this research to test the extent of employees' commitment in Hong Kong's ICT industry. The appropriateness of her model was determined by comparing with models by Meyer and Allen (1991), McGee and Ford (1987), and Ling et al. (2001). The first hypothesis was therefore developed as follows.

Hypothesis H1: Wang's (2004) five-component organizational commitment model is more appropriate than Western models for describing the organizational commitment of employees in Hong Kong's ICT industry.

Independent Constructs

The model of knowledge sharing by De Vries et al. (2006) was used in this research because not only did their study focus on both organizational commitment and knowledge sharing practices, but it also focused on understanding the issues involved in knowledge sharing practices in relation to behavioral and attitudinal approaches, social relations and trust issues. The two processes in their model, knowledge donating and collecting were applied in this research. Two hypotheses were developed for testing the effect of the two activities in knowledge sharing as the independent constructs on individual components of the organizational commitment model (dependent constructs).

| Hypothesis H2: | Knowledge donating is positively associated with individual components of Wang's (2004) organizational commitment model. |
|----------------|--|
| Hypothesis H3: | Knowledge collecting is positively associated with individual components of Wang's (2004) organizational commitment model. |
| | |

A fourth hypothesis was developed for testing the overall effect of knowledge sharing practices on organizational commitment of employees in Hong Kong's ICT industry.

Hypothesis H4: Knowledge sharing practices is positively associated with commitment to organizations of employees in Hong Kong's ICT industry.

RESEARCH METHOD

Sample

Simple random sampling technique was used for this research because it involved a study of companies in Hong Kong's ICT industry. The reason for using simple random sampling was to ensure that respondents from different types of companies in the ICT industry were selected with equal probability. Five hundred companies were randomly drawn from Hong Kong's ICT industry as the subjects of the research. According to the "Hong Kong as an Information Society 2007" report produced by the Census and Statistics Department of the Hong Kong's ICT industry in 2005. Therefore a sample size of 500 companies and 1,500 participants (an average of three employees from each company) was considered sufficient for generalization of findings. In addition, a sample size of 500 companies in knowledge sharing and five variables in organizational commitment (Cavana, Delahaye & Sekaran, 2001). Participant companies were found from lists of

various business associations and companies publicly listed on the Hong Kong Trade Development Council's website (www.tdctrade.com).

Questionnaire Design

A website-based self-administered anonymous electronic questionnaire was used to collect responses. According to Bryman (2004), not only questionnaires posted to the Internet are more economical and reach a larger number of respondents but respondents also feel more comfortable submitting an Internet-based questionnaire rather than having to go to the bother of returning a paper-based questionnaire by post. In addition, a web-based online questionnaire ensures the anonymity of respondents so researchers could not identify the identity of respondents. A five-point Liker scale was used in the questions.

The following provides the rationale for the design of the questionnaire by considering knowledge sharing practices and organizational commitment. Questions used are in Appendix 1.

Knowledge sharing practices

The questions for studying knowledge sharing were adapted from those used by De Vries et al. (2006) in their study on knowledge sharing, communication style, job satisfaction, and performance beliefs. The applicability and appropriateness of the questions by De Vries et al. (2006) to this research is because of the similarity of variables between this research and theirs. In addition, the Cronbach's alpha value obtained from their research in testing internal reliability were all higher than 0.7 (Nunnally, 1978). The questions were modified to ask respondents whether their colleagues like to donate knowledge to them and whether they are encouraged to collect knowledge from their colleagues and how this would affect their commitment to their organizations.

Organizational Commitment

The five-component model by Wang (2004) in her studies of Chinese employees on organizational commitment was used in this research. The five components are affective commitment, normative commitment, active continuance commitment, passive continuance commitment, and value commitment. Wang's (2004) questions were replicated in the questionnaire used for this research because the five-component organizational commitment model was considered appropriate for studying Chinese employees. The questions it used could therefore be justifiably applied to the study of employee behavior in Hong Kong, which has a predominately Chinese culture. In addition, Cronbach's alpha values for testing internal reliability of the multiple-indicator questions were all over 0.7 (Nunnally, 1978).

Data Analysis

Data was analyzed by using confirmatory factor analysis and Pearson product moment correlation. Confirmatory factor analysis (CFA) was used to test the appropriateness of different organizational commitment models to the data collected in this research. CFA is a necessary statistical method for confirming a pre-defined model (Labatmediene et al., 2007; Wang, 2004). Pearson product moment correlation is a statistical method for testing association of two variables especially for studies in organizational commitment (Chen & Francesco, 2003; Wang, 2004) so it was used to test the positive effect of each hypothesis H2 to H4.

RESULTS

Characteristics of the Sample

Table 1 provides a summary of the demographic variables, such as age, gender, education, as well as industry information such as experiences in the ICT industry and sizes of organizations. Over 80% of the respondents have bachelor degree level of education which shows the importance of sharing knowledge among them in enhancing their work commitment. On average, there are over 20% of respondents from each size of companies (10 to 50 employees, 51 to 100 employees, 101 to 200 employees and more than 200 employees). These show that knowledge sharing is not only dominant in large organizations.

| Table 1: Characteristics of the Sample |
|--|
|--|

| Demographic Variables | Measures | Frequency | Percentage |
|-----------------------|-------------------------|-----------|------------|
| Gender | Male | 248 | 81.3% |
| | Female | 57 | 18.7% |
| Age | Younger than 30 years | 121 | 39.4% |
| 2 | 31 to 39 years | 119 | 38.4% |
| | 40 to 49 years | 61 | 19.7% |
| | More than 49 years | 6 | 1.9% |
| Education | Sub-degree Level | 41 | 13.3% |
| | Bachelor Degree | 149 | 48.4% |
| | Master degree or higher | 118 | 38.3% |
| Size of company | Fewer than 50 | 83 | 26.9% |
| (Number of employees) | 51 to 100 | 63 | 20.4% |
| | 101 to 200 | 71 | 23.0% |
| | More than 200 | 92 | 29.8% |

Appropriateness of five components Model

Confirmatory factor analysis was used to test the appropriateness of Wang's (2004) model. There were four models studied:

- Model 1: Affective commitment, Continuance commitment, Normative commitment (A-C-N)
- Model 2: Affective commitment, Continuance commitment, Normative commitment, Value commitment (A-C-N-V)
- Model 3: Affective commitment, Continuance commitment with high-sacrifice, Continuance commitment with low-alternative, Normative commitment (A-Chs-Cla-N)
- Model 4: Affective commitment, Active continuance commitment, Passive continuance commitment, Normative commitment, Value commitment (A-Ca-Cp-N-V)

| Model | GFI | AGFI | CFI | NFI | \mathbf{x}^2 | df | χ²/df | RMSS |
|----------------|------|------|------|------|----------------|----|-------|-------|
| 1. A-C-N | 0.75 | 0.64 | 0.83 | 0.81 | 650.06 | 74 | 8.785 | 0.140 |
| 2. A-C-N-V | 0.80 | 0.72 | 0.88 | 0.86 | 588.80 | 84 | 7.010 | 0.110 |
| 3. A-Chs-Cla-N | 0.89 | 0.84 | 0.94 | 0.92 | 279.66 | 71 | 3.939 | 0.072 |
| 4. A-Ca-Cp-N-V | 0.90 | 0.85 | 0.95 | 0.93 | 299.67 | 80 | 3.746 | 0.069 |

Table 2: Results of Confirmatory Factor Analysis on the Four Models

The above table 2 shows that the results of the confirmatory factor analysis of the different organizational commitment models identified by this study are similar to those of Wang's (2004) model. The value of GFI of model 4 (five-component model) is 0.90 whilst the GFI of the other three models are lower than 0.9. This suggests that Wang's (2004) five-component organizational commitment model has a better fit to the data collected in Hong Kong because of the GFI index more than 0.90 (Byrne, 1989). In addition, the indices CFI and NFI of model 4 are also greater than 0.9 and higher than the same indices for model 1 to model 3. Although the index AGFI is below 0.9, it is still the highest when compared to other models and is a further indication that model 4 has the best fit to the data. The ratio $\chi 2/df$ of model 4 is 3.746. Although it is not below 2 (Mclver & Carmines, 1981), this value is the lowest among the four models tested. RMSS of model 4 is not below 0.05 (Byrne, 1989), but it is also the lowest value. The factor analysis confirms that Wang's (2004) five-component model is more appropriate for describing the organizational commitment of employees in Hong Kong's ICT industry and supports hypothesis H1. The data and Wang's (2004) model could therefore be used for further statistical analysis.

Correlations between the Measuring Constructs

Means, standard deviations, and inter-correlations between knowledge sharing and organizational commitment were computed and shown in Table 3 below. All five components of Wang's (2004) organizational commitment model are positively correlated with knowledge donating at a significance level of 0.01 using a one-tailed test.

This supports hypothesis H2 that knowledge donating is positively related to individual components of Wang's (2004) organizational commitment model. The data also shows that all five components of Wang's (2004) organizational commitment model are positively correlated with knowledge collecting at a significance level of 0.01 applying a one-tailed test. This supports hypothesis H3 that knowledge collecting is positively associated with the individual components of Wang's (2004) organizational commitment model.

Table 3: Means, Standard Deviations and Correlation of the Measuring Constructs

| | Constructs | Mear | n SD | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|--------------------------------|------|------|--------|--------|--------|--------|--------|--------|------|
| 1 | Knowledge donating | 3.86 | 0.57 | 1.00 | | | | | | |
| 2 | Knowledge collecting | 4.03 | 0.53 | 0.69** | 1.00 | | | | | |
| 3 | Affective commitment | 3.84 | 0.65 | 0.53** | 0.54** | 1.00 | | | | |
| 4 | Active continuance commitment | 3.83 | 0.70 | 0.56** | 0.60** | 0.64** | 1.00 | | | |
| 5 | Passive continuance commitment | 3.41 | 0.85 | 0.20** | 0.19** | 0.06 | 0.15** | 1.00 | | |
| 6 | Normative commitment | 3.56 | 0.67 | 0.31** | 0.24** | 0.31** | 0.30** | 0.50** | 1.00 | |
| 7 | Value commitment | 3.97 | 0.58 | 0.46** | 0.50** | 0.48** | 0.72** | 0.19** | 0.34** | 1.00 |

Note: ** Correlation is significant at the 0.01 level (one-tailed test)

Pearson product moment correlation between knowledge sharing practices (KS) and organizational commitment (OC) was computed (Table 4) to test the influence of KS on OC.

Table 4: Means, Standard Deviations and Correlation between Knowledge Sharing and Organizational Commitment

| Constructs | Mean | Standard Deviation | KS | OC | |
|------------|------|-----------------------|---------|----|--|
| KS | 3.94 | 0.50 | 1 | | |
| OC | 3.75 | 0.49 | 0.649** | 1 | |

** Correlation is significant at the 0.01 level (one-tailed test).

The value of the correlation coefficient is 0.649 and significant as the value is less than 0.01 in a one-tailed test between knowledge sharing practices and organizational commitment. This supports hypothesis H4 that knowledge sharing practices is positively associated with organizational commitment. The coefficient 0.649 is quite high, which shows that the relationship is quite strong.

DISCUSSION

Findings from this research have shown that knowledge-sharing is a significant and positive antecedent to organizational commitment in a Confucian culture. Thus this study contributes to the body of knowledge by showing the positive effect of knowledge-sharing practices on the individual components of a five-component organization commitment model. By employees practicing knowledge-sharing in Hong Kong's ICT companies, affective commitment will be enhanced if knowledge-sharing practices affect employees' psychological behavior and attitude towards their organization. Active continuance commitment could be increased if employees understand that they might not have the same opportunities for career development in other companies. Value commitment is enhanced if employees see a value return for sharing their knowledge with colleagues in their organization. Although passive continuance and normative commitments are lower amongst ICT employees in Hong Kong, which show that the duty and obligation of staying in the employing company is lower for employees in the ICT industry, the findings from this research indicate that knowledge sharing practices will also have a positive and significant effect on these two components. Even though the relatively lower passive continuance commitment, it could be improved by affecting employees' subconscious perception of the importance of their organization, and normative commitment could be enhanced if knowledge sharing practices help to increase employees' moral obligation to remain with their organization. This research is especially significant for the ICT industry that requires frequent updated knowledge. Employees feel a greater sense of commitment if they have opportunities for learning knowledge in their organizations and managers will not be reluctant to nurture an environment for promoting knowledge sharing.

The finding that a high level of knowledge sharing practices is positively related to organizational commitment is useful for managers of ICT companies to know. Managers should nurture a knowledge sharing culture in their organizations in order to retain employees. Since formal training programs need extensive resources and cannot be conducted frequently, informal social networks built between employees can motivate them to actively share knowledge. Managers should cultivate an organizational culture that encourages knowledge sharing. This can be done by, for example, creating a trusting environment among employees by arranging social activities with participation from both managers and staff; encouraging open communication in the workplace by providing shared work areas instead of partitioned areas or individual offices, or enterprise-based information systems for instant interactive communication (Al-Alawi, Al-Marzooqi & Mohammed, 2007). Managers should encourage informal social gatherings in workplaces for relaxed communication between employees (Wenger & Snyder, 2000), Reward systems can be used to encourage participation and reporting of outputs to managers is not necessary (Wenger & Snyder, 2000). With the establishment of a high level of knowledge sharing practices in organizations, affective commitment, active continuance commitment and value commitment will be significantly enhanced.

LIMITATIONS AND FUTURE RESEARCH

This research applied a quantitative methodology to study knowledge sharing practices as a positive and significant antecedent to organizational commitment. The research examined the positive effect of knowledge sharing practices on organizational commitment but did not attempt to find the reasons for the results obtained. It is recommended further qualitative research be conducted to explore the causal effect between these two constructs.

Although it is recognized that there might be other contributing factors, this research only studied the effect of knowledge-sharing practices as an antecedent to organizational commitment. Consequently, knowledge sharing was the only independent factor used that is relevant to the extent of organizational commitment amongst employees in Hong Kong's ICT industry. Further studies are recommended to consider other variables as predictors of organizational commitment within the same context. Such variables might include personal characteristics, job characteristics, organizational support, and job satisfaction. Studying only Hong Kong's ICT industry might limit the generalization of the results to all employees in Hong Kong. Since it would appear that no other studies have applied Wang's (2004) organizational commitment model in the context of Hong Kong's ICT industry, there are no findings to support the validity of the model for use in the Hong Kong context. Although this research found Wang's (2004) model to be valid for use in the Hong Kong context, further research is recommended on other industries in Hong Kong and China in order to provide better generalization of results to the Chinese context and Confucian-based culture.

In order to consolidate support for the appropriateness of Wang's (2004) organizational commitment model in a Chinese context, researchers are encouraged to conduct further studies in different areas of Mainland China because of the diverse cultural differences between northern and southern parts of China. In addition, the validity of Wang's model in this research might imply that her model would also be appropriate for use in a Western context because enterprises in Guangdong Province (southern China) are more market-oriented and their employees might have different attitudes towards commitment than in other parts of China, especially since they have more frequent contacts with foreigners and are more likely to be influenced by Western culture. Researchers could test Wang's model in a western context in order to determine whether or not her model could be universally applied. In order to enhance the generalizability of results found in this research for ICT industry, it is recommended that a similar study of organizational commitment be conducted in other industries in Hong Kong. Comparing the results from such research will help to generalize the findings because different industries might have different levels of need for knowledge sharing and employee commitment.

REFERENCES

- Al-Alawi, A. I., Al-Marzooqi, N. Y. and Mohammed, Y. F. 2007 "Organizational culture and knowledge sharing: critical success factors," *Journal of Knowledge Management*, (11: 2), pp.22-42.
- Angle, H. L. and Perry, J. L. 1981 "An empirical assessment of organizational commitment and organizational effectiveness," *Administrative Science Quarterly*, (26:1), pp. 1-14.
- Bashir, S. and Ismail Ramay, M. 2008 "Determinants of organizational commitment: a study of information technology professionals in Pakistan," *Journal of Behavioral and Applied Management*, (9:2), pp.226-238.

Becker, H. S. 1960 "Notes on the concept of commitment," American Journal of Sociology, (66:1), pp.32-40.

- Boer, N., van Baalen, P. J. and Kumar, K 2002 "The importance of sociality for understanding knowledge sharing processes in organizational contexts," *ERIM Report Series Research in Management, Rotterdam Erasmus Research Institute of Management (ERIM).*
- Bosua, R. and Scheepers, R. 2007 "Towards a model to explain knowledge sharing in complex organizational environments," *Knowledge Management Research & Practice*, (5:2), pp.93-109.
- Byrne, B. M. 1989 A primer of LISREL: Basic applications and programming for confirmatory factor analytic models, New York: Springer-Verlag.
- Bryman, A. 2004 Social Research Methods, Oxford: Oxford University Press.
- Cabrera, A. and Cabrera, E. F. 2002 "Knowledge-sharing dilemmas," Organization Studies, (23:5), pp.687-710.
- Cavana, R., Delahaye, B. and Sekaran, U. 2001 *Applied Business Research: Qualitative and Quantitative Methods*, John Wiley and Sons, Australia.
- Chen, Z.X. and Francesco, A.M. 2003 "The Relationship between the three components of commitment and employee performance in China," *Journal of Vocational Behavior*, (62:3), pp.490–510.
- Cheng, Y. and Stockdale, M.S. 2003 "The validity of the three-component model of organizational commitment in a Chinese context," *Journal of Vocational Behavior*, (62:3), pp.465-489.
- Cheung, C.K. and Chan, A. C.F. 2008 "Benefits of Hong Kong Chinese CEOs' Confucian and Daoist leadership styles," *Leadership & Organization Development Journal*, (29:6); pp.474
- De Vries, R. E., Van den Hoff, B. and de Ridder, J. A. 2006 "Explaining knowledge sharing: the role of team communication styles, job satisfaction, and performance beliefs," *Communication Research*, (33:2), pp.115-135.
- Gao, Z. and Kim, J. H. 2009 "Regulation of soft issues in advertising in Confucian societies: a comparative examination," *Asia Pacific Journal of Marketing and Logistics*, (21:1); pp.76
- Hackett, R. D., Bycio, P. and Hausdorf, P. A. 1994 "Further assessments of Meyer and Allen's (1991) threecomponent model of organizational commitment," *Journal of Applied Psychology*, (79:1), pp.15-23.
- *"Hong Kong as an Information Society 2007"* by the Census and Statistics Department of the Hong Kong Special Administrative Region (HKSAR)
- Hofstede, G. 1998 "Attitudes, values and organizational culture: disentangling the concepts," *Organization studies*, (19:3), pp.477-492.
- Koskinen, K. U. 2003 "Evaluation of tacit knowledge utilization in work units," Journal of Knowledge Management, (7:5), pp.67-81.
- Labatmediene, L., Endriulaitiene, A. and Gustainiene, L. 2007 "Individual correlates of organizational commitment and intention to leave the organization," *Baltic Journal of Management*, (2:2), pp.196-212.
- Li, W., Ardichvili, A., Maurer, M. Wentling, T. and Stuedemann, R. 2007 "Impact of Chinese culture values of knowledge sharing through online communities of practice," *International Journal of Knowledge Management*, (3:3), pp.46-59.
- Ling, W, Zhang, Z. and Fang, L. 2001 "A study of the organizational commitment of Chinese employees," *Social Science in China*, (128:2), pp.90-102.
- Mathieu, J. E. and Zajac, D. M. 1990 "A review and meta-analysis of the antecedents, correlates, and consequences of organizational commitment," *Psychological Bulletin*, (108:2), pp.171-194.

- Mayer, R. C. and Schoorman, F. D. 1992 "Predicting participation and production outcomes through a twodimensional model of organizational commitment," *Academy of Management Journal*, (35:3), pp.671-684.
- McGee, G. W. and Ford, R. C. (1987 "Two (or more?) dimensions of organizational commitment: reexamination of the affective and continuance commitment scales," *Journal of Applied Psychology*, (72:4), pp.638–641.
- Mclver, J. P. and Carmines, E. G. 1981 Unidimensional scaling, Beverly Hill, CA: Sage Publication.
- Meyer, J. P. and Allen, N. J. 1991 "A three-component conceptualization of organizational commitment," *Human Resource Management Review*, (1:1), pp.61-89.
- Mowday, R. T., Steers, R. M. and Porter, L. W. 1979 "The measurement of organizational commitment," *Journal of Vocational Behavior*, (14:2), pp.224-247.
- Nonaka, I. 1991 "The knowledge-creating company," Harvard Business Review, (69:6), pp.96-104.
- Nonaka, I and Konno, N. 1998 "The concept of "ba": building a foundation for knowledge creation," *California Management Review*, (40:3), pp.40-54.
- Nunnally, J. C. 1978 Psychometric theory, 2nd ed., New York: McGraw-Hill.
- O'Neill, B. S. and Adya, M. 2007 "Knowledge sharing and the psychological contract; managing knowledge workers across different stages of employment," *Journal of Managerial Psychology*, (22:4), pp.411-436.
- Porter, L. W., Steers, R. M., Mowday, R. T. and Boulian, P. V. 1974 "Organizational commitment, job satisfaction, and turnover among psychiatric technicians," *Journal of Applied Psychology*, (59:5), pp.603-609.
- Takao, S, 1998 The Multidimensional of Organizational Commitment: An Analysis of Its Antecedents and Consequences among Japanese Systems Engineers, Institute for Economic and Industry Studies Keio University: Tokyo. (cited by Wang 2004)
- Van den Hooff, B. and Van Weenen, F. de L. 2004 "Committed to share: commitment and CMC use as antecedents of knowledge sharing," *Knowledge and Process Management*, (11:1). pp.13-24.
- Wang, Y. 2004 "Observations on the organizational commitment of Chinese employees: comparative studies of state-owned enterprises and foreign-invested enterprises," *International Journal of Human Resource Management*, (15:4), pp.649-669.
- Wasko, M. M. and Faraj, S. 2005 "Why should I share? Examining social capital and knowledge contribution in electronic network of practice," *MIS Quarterly*, (29:1); pp.35-57.

APPENDIX 1

Knowledge Sharing Practices

Knowledge donating:

When my colleagues learned something new, they tell me about it.

My colleagues share information they have with me.

My colleagues think it is important that I know what they are doing.

My colleagues regularly tell me what they are doing.

Knowledge collecting:

When I need certain knowledge, it is possible to ask my colleagues about it.

I am informed of what my colleagues know.

I am allowed to ask my colleagues about their abilities when I need to learn something.

When a colleague is good at something, it is possible to ask them to teach me how to do it.

2-4 Dec 2009, Melbourne Organizational Commitment

Affective Commitment:

I am extremely glad that I chose this company to work for over others I was considering at the time I joined. I talk up this company to my friends as a great company to work for. I am proud to tell others that I am part of this company.

Active Continuance Commitment:

I work for the company because it provides me with many on-the-job training opportunities.

I work for the company because it is a good chance to realize my goals.

I work for the company because I can make full use of what I have learned here.

I work for the company because of the challenging job.

I work for the company because there are many opportunities for promotion.

Passive Continuance Commitment:

I work for the company because I cannot find a better one.

I cannot quit the job arbitrarily because I have to support my family.

I work for the company because I do not want to lose my fringe benefits.

Normative Commitment:

I consider it my obligation to work for the same company all the while.

I would like lifetime employment if possible.

I would do any job as long as I work here.

Value Commitment:

I am willing to put in a great deal of effort beyond that normally expected in order to help this company to be successful.

I really care about the fate of this company.

This company really inspires me to do my job to the very best of my abilities

One should work with utmost efforts for the company.