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Knowledge sharing enablers, processes and firm innovation capability

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Abstract

Purpose – This paper aims to examine a research model that links knowledge sharing enablers, processes and outcome dimensions in law enforcement in the United Arab Emirates (UAE). It attempts to examine the impact of knowledge self-efficacy and top management support on knowledge donating and collecting. It also attempts to examine the effect of these two aspects of knowledge sharing on firm innovation capability.

Design/methodology/approach – This study used a quantitative approach, with data collected by questionnaire from 685 police officers in a law enforcement agency in the UAE.

Findings – Knowledge self-efficacy and top management support have a positive impact on knowledge donating and collecting. Only knowledge collecting, however, had a positive effect on firm innovation capability.

Research limitations/implications – The study has significant academic and practical implications. It supports a previous research model that links enablers, processes and outcomes of knowledge sharing, and confirms them in the context of law enforcement in the UAE. It could also help law enforcement agencies to promote a knowledge sharing culture to support innovation in the UAE.

Originality/value – The research model is likely to be particularly valuable in knowledge-intensive organizations such as the law enforcement sector. Knowledge sharing is often overlooked by organizations in the UAE because there has to date been little research in this field.

Keywords United Arab Emirates, Knowledge sharing, Innovation capability, Top management support, Knowledge self-efficacy

Paper type Research paper

1. Introduction

In the field of knowledge management, the role of knowledge sharing has often been neglected by organizations in the United Arab Emirates (UAE) because of the scarcity of relevant research (Ahmad and Daghfous, 2010). This study therefore focused on examining knowledge sharing in the context of law enforcement in the UAE. Knowledge sharing is considered essential for knowledge-intensive organizations such as law enforcement institutions (Collier, 2006).

Previous studies have emphasized the importance of knowledge sharing and especially its influence on firm innovation capability (FIC). It is a building block for organizational success and often considered an essential survival strategy in a knowledge-intensive era (Witherspoon *et al.*, 2013). Knowledge is rooted in the intelligence of individuals and is visible in tasks, systems and customs, all of which are very difficult to imitate (Davenport and Prusak, 1998). Davenport and Prusak (1997) stated that knowledge sharing is hard because people fear that by sharing their knowledge, they will lose status and power in their organizations. Gruenfeld *et al.* (2000) demonstrated that knowledge sharing not only reduces the cost of production or service provision but also contributes to the success of an organization, as it helps to develop innovation capability.

This study developed a knowledge sharing model across three dimensions: enablers, processes and outcomes. The study aimed to examine the effect of two enablers [knowledge self-efficacy (KSE) and top management support (TMS)] on knowledge donating (KD) and collecting (KC), which together make up the knowledge sharing process (van den Hooff and de Ridder, 2004). The proposed knowledge sharing model also attempts to examine the impact of KD and KC on FIC in the context of law enforcement in the UAE.

The remainder of this paper is structured as follows. The next section reviews the relevant literature and develops the research hypotheses. Next, the research methodology is presented, including discussion of the measures used. This is followed by the results and discussion section, and finally conclusions are presented which includes the theoretical and managerial contributions made.

2. Theoretical background

2.1 Knowledge sharing

Knowledge sharing is the exchange of experience, skills and tacit and explicit knowledge among employees as part of an organization's social interaction culture (Hogel *et al.*, 2003). Organizations increasingly depend on creating and building a knowledge sharing base as an important resource capability (Huber, 1996). Inkpen (2000, p. 124) stated that "unless individual knowledge is shared throughout an organization, the knowledge will have a limited impact on organizational effect". Knowledge sharing occurs at both individual and organizational levels (Calantone *et al.*, 2002). At an individual level, it is about communicating with colleagues to help them get something done better, more rapidly and more efficiently (Calantone *et al.*, 2002), as well as transferring and sharing individual academic knowledge and skills to enhance workplace learning (Prince *et al.*, 2015). At the organizational level, it is about capturing, organizing, sharing and reusing experience-based knowledge that is available in the organization and making it available to others in the business (Calantone *et al.*, 2002).

In the past, the majority of studies conceptualized knowledge sharing behavior using the theory of reasoned action (Fishbein and Ajzen, 1975) or its extension, the theory of planned behavior (Ajzen, 1991). Both are well-established theories with pre-determined variables that influence actual behavior and behavior intentions (Tangaraja *et al.*, 2015). These theories were later integrated with others, such as social capital theory, self-determination theory and social exchange theory. This showed how other factors can affect employee attitudes to knowledge sharing behavior, subjective norms and perceived behavioral control (Tohidinia and Mosakhani, 2010).

2.2 Knowledge donating and knowledge collecting

Knowledge sharing behavior is generally viewed by scholars as either unidirectional or bidirectional, depending on the point of view (Tangaraja *et al.*, 2015). Using a unidirectional perspective, sharing of knowledge is considered to occur in one direction, from the provider to the recipient (Yi, 2009). The bidirectional perspective claims that the sharing of knowledge involves both donating and collecting knowledge (van den Hooff and de Ridder, 2004). These perspectives were first introduced by Van der Rijt (2002) and Ardichvill *et al.* (2003), who discussed knowledge sharing as involving both the supply and demand for new knowledge. This has since been supported by many other researchers (Karkoulian *et al.*, 2010; Lin, 2007; Tohidinia and Mosakhani, 2010).

Knowledge donation is defined as an employee's willingness to communicate actively with colleagues (Darroch and McNaughton, 2002). It can also mean the process of employees communicating their personal intellectual capital to others (Jantunen, 2005). The drive behind donating knowledge is to convert it from tacit to explicit and enable it to be owned by the entire organization (von Krogh *et al.*, 2012). KC means actively consulting with colleagues to learn from them (Darroch and McNaughton, 2002). It is also defined as the process of employees consulting with colleagues to encourage them to share their intellectual capital (Jantunen, 2005). It refers to the process of seeking out knowledge by consulting people, to improve the overall amount of knowledge available to the organization (von Krogh *et al.*, 2012).

The following hypothesis is therefore proposed to test the bidirectional perspective of knowledge sharing (KC and KD):

H1. Employee willingness to collect knowledge significantly and positively correlates with employee willingness to donate knowledge.

2.3 Knowledge sharing enablers, processes and outcomes

There are many studies that focus on the relationship between knowledge sharing enablers and processes (Bock and Kim, 2002; Yeh *et al.*, 2006), and between enablers and outcomes (Syed-Ikhsan and Rowland, 2004). A study by Lin (2007) suggested a framework that consists of three dimensions for knowledge sharing: knowledge sharing enablers, processes and outcomes. Kumar and Rose (2012) built on this framework and added a moderator variable between processes and outcome.

Knowledge sharing enablers are the instrument for developing individual and organizational learning, as well as facilitating employees' learning in teams and organizational units. Many enablers of knowledge sharing behavior have been identified, including employee motivation, organizational context and information technology applications (Lin and Lee, 2006; Wasko and Faraj, 2005). Scholars generally agree that knowledge sharing depends on the characteristics of individuals, including experience, beliefs and values such as enjoyment in helping others and KSE (Wasko and Faraj, 2005). Organizational enablers include an organizational climate designed to capture efficiently the benefits of an innovation-supporting culture (Saleh and Wang, 1993). Many organizational enablers have been identified, including TMS (Connelly and Kelloway, 2003; Lin, 2006), organizational rewards (Al-Alawi *et al.*, 2007; Bartol and Srivastava, 2002; Cabrera and Bonache, 1999) and reciprocity. Technological enablers include using information and technology use (Lin, 2007) and creating databases to share knowledge between individuals, teams and departments in an organization (Hall-Andersen and Broberg, 2014).

Knowledge sharing processes show how employees within an organization share their work-related expertise, knowledge, values, experience and information with other employees (Darroch and McNaughton, 2002). In this paper, knowledge sharing behavior is considered bidirectional, involving both KD and KC. The outcomes dimension refers to the effect of knowledge sharing on different positive outcomes including firm effectiveness (Yang, 2007), innovation capability (Yesil and Dereli, 2013), competitive advantage (Lin and Chen, 2008), productivity improvement (Noaman and Fouad, 2014), team task performance (Cheng and Li, 2011), job satisfaction (Zumrah, 2013) and financial performance (Wang *et al.*, 2014). This paper focuses on two knowledge sharing enablers, one individual and one organizational, and one outcome.

2.3.1 Knowledge self-efficacy and knowledge sharing processes. Self-efficacy is defined as "the judgments of individuals regarding their capabilities to organize and execute courses of action required to achieve specific levels of performance " (Bandura, 1986, p. 391). Wasko and Faraj (2005) suggested that self-efficacy can strongly motivate employees to share knowledge with colleagues. It has therefore been identified as an enabler of knowledge sharing (Bandura, 1982, 1986; Igbaria and Iivari, 1995). If knowledge sharing concerns are seen as important by individuals, and if they feel themselves capable enough or internally motivated to address them, the link between self-efficacy and knowledge sharing behavior (collecting and donating) becomes more obvious (Kumar and Jaurhari, 2016).

Employees who are expected to achieve tasks are those who are highly confident in their abilities to provide valued and useful knowledge (Constant *et al.*, 1994). KSE is therefore usually seen in employees who believe that their knowledge can help to solve work-related problems and improve job efficacy (Luthans, 2003). Employees who believe that they can contribute to the performance of their organization by sharing knowledge will develop greater positive readiness to both donate and collect knowledge (Luthans, 2003; Lin, 2007).

The following hypotheses are therefore proposed:

H2a. KSE significantly and positively affects employee willingness to donate knowledge.

H2b. KSE significantly and positively affects employee willingness to collect knowledge.

2.3.2 Top management support and knowledge sharing processes. The level of TMS affects knowledge management practices such as knowledge sharing within organizations. Managers can create conditions that encourage knowledge sharing, allowing individuals to exercise their knowledge sharing skills and expanding the organization's pool of knowledge (Crawford, 2005; Politis, 2002). Politis (2002) suggested that the role of leaders and top managers is increasingly changing from information and knowledge gate-keeping to encouraging knowledge sharing among all employees. TMS is therefore considered a key influence on knowledge sharing in organizations (Connelly and Kelloway, 2003) and was found to be crucial in creating a supportive culture and providing sufficient resources (Lin, 2006, 2007). A recent study by Han *et al.* (2016) also found that leaders' support had a positive influence on knowledge sharing, with individual, teams and organizational issues playing a mediating role.

MacNeil (2004) also highlighted the importance of TMS in creating a knowledge sharing culture in organizations. Lin and Lee (2004) observed that top management

needs to encourage knowledge sharing intentions to develop a positive organizational knowledge sharing climate. Lin (2007) found that TMS has a positive impact on both KD and KC in organizations.

The following hypotheses are therefore proposed:

H3a. TMS significantly and positively affects employee willingness to donate knowledge.

H3b. TMS positively influences employee willingness to collect knowledge.

2.3.3 Knowledge sharing processes and firm innovation capability. Many studies have underlined the importance of knowledge sharing in enhancing innovation capability (Liao *et al.*, 2007; Liebowitz, 2002; Lin, 2006). Firm innovativeness refers to an openness to new ideas as a characteristic of an organization's culture (Hurley and Hult, 1998). Innovation is either described as changes in what an organization offers to the world (product/service innovation) or the approach it develops in delivering those offerings (process innovation) (Francis and Bessant, 2005). In the current business environment, it has been suggested that firms need innovation capabilities to survive in an unpredictable environment (Johnson *et al.*, 1997).

Motivation in organizations is also an important influence on both KC and KD. It therefore leads to greater innovation capability (Jantunen, 2005). An organization that encourages employees to contribute knowledge within groups and organizations is likely to produce new ideas and create new business opportunities, facilitating innovation capabilities and activities (Darroch and McNaughton, 2002). WP2 Partners (2002) claimed that knowledge sharing speeds up the innovation process by encouraging interaction and combination of ideas. It is therefore expected that improved knowledge sharing processes would enhance the innovative capability of the organization. Another interesting study by Ness and Søreide (2014) developed six phases for creative knowledge processes that lead to innovation. These are initiation, knowledge distribution, polyphony, imagination, idea formulation and consolidation.

The following hypotheses are therefore proposed:

H4a. Employee willingness to donate knowledge positively influences FIC.

H4b. Employee willingness to collect knowledge positively influences FIC.

3. Methodology

3.1 Hypothesized research model
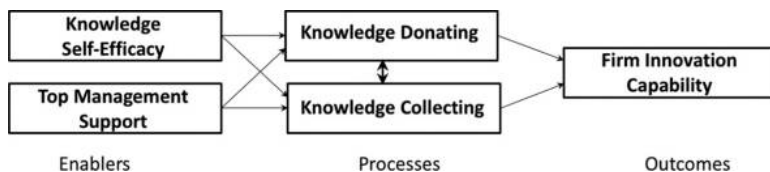Based on the literature, a research model was drawn up for empirical testing in this study (Figure 1).

Figure 1.
Hypothesized
research model

3.2 Design of the study

This was a quantitative study, with data collected from a law enforcement agency in the UAE using standard research instruments. The questionnaire was distributed to 1,200 employees across different levels and functions. In total, 716 completed questionnaires were received, of which 685 were usable, and 29 were incomplete. Responses were analyzed from 616 male and 69 female employees of the law enforcement agency under investigation. The respondents were mainly middle managers, including 22 department managers, 92 section heads, 291 branch managers and 280 officers with police ranks including 25 colonels, 22 lieutenant colonels, 120 majors, 203 captains, 174 first lieutenants, 112 lieutenants and 20 citizens. Respondents came from seven different directorates, each with different functions and objectives. Linear step-wise multi-regression analysis is used to test the hypothesized research model.

3.3 Measures

The study used four items from Riggs *et al.* (1994) to measure KSE on a five-point Likert-type scale. The items in this scale included "I have confidence in my ability to share knowledge with my colleagues" and "I have the skills needed to provide valuable knowledge to my colleagues". Cronbach's alpha for this construct was 0.811.

TMS was assessed using four items from Lee and Wong (2015). This scale used a five-point Likert-type scale and included items such as "My colleagues are happy with the amount of support given by the top management to knowledge management initiatives in the organization" and "My colleagues are satisfied with the commitment of the top management to knowledge management initiatives in my organization". Cronbach's alpha for this construct was 0.852.

The KD and KC scales consisted of four and five items from Lawson (2003), each using a five-point Likert-type scale. Items included "I provide my knowledge to my colleagues face-to-face or through the intranet and it is available to everyone who needs it in my organization" and "I send out timely reports with valuable/important information to my colleagues" for KD and "I can receive knowledge easily from my colleagues face-to-face or through the intranet in my organization" and "I receive timely reports with valuable/important information from my colleagues" for KC. Cronbach's alpha was 0.728 for KD and 0.813 for KC.

Finally, four items from Zheng (2009) were used to measure FIC on a five-point Likert-type scale. These items included "My organization waits for a while before providing any new services, compared to its key competitors" and "Compared to key competitors, my organization implements creative ideas into the services offered very late". Cronbach's alpha for FIC was 0.732.

4. Results and discussion

The study was designed to examine the linkages between enablers (KSE and TMS), processes (KD and KC) and outcome (FIC) variables. Based on the literature review, the researcher proposed seven hypotheses. This section sets out and discusses the results for all seven hypotheses.

A two-tailed Pearson correlation test between KD and KC suggested a strong positive relationship between these variables (0.591), significant at the 0.01 level. This finding supports the bidirectional perspective of knowledge sharing behavior (Ardichvill *et al.*, 2003; van den Hooff and de Ridder, 2004; Van der Rijt, 2002).

Table I shows the relative impact of KSE and TMS on the KD behavior of employees in the organization. KSE and TMS together explain 27.7 per cent of the KD behaviors of employees. The remaining 72.3 per cent of KD behaviors are yet to be explained. Of the 27.7 per cent explained variance in KD behaviors, employees' belief in their own knowledge abilities contributes 18.6 per cent, while the support of the top management contributes only 9.1 per cent.

These findings are similar to those of Wasko and Faraj (2005) and Constant *et al.* (1994). The findings of this study, however, suggest the need for further studies to explain the remaining variance in KD behaviors among employees. The result may be because KD is a voluntary behavior (Darroch and McNaughton, 2002), which might therefore be influenced more by personal enablers (such as KSE) than organizational enablers (such as TMS).

Table II shows the relative effect of KSE and TMS on KC behavior. KSE and TMS together explain 39.9 per cent of the KC behaviors of employees, leaving 60.1 per cent unexplained. The support of top management contributes 34.4 per cent, with employees' belief in their own knowledge abilities contributing only 5.5 per cent.

Again, this is consistent with previous studies by MacNeil (2004) and Lin and Lee (2004). However, these findings also suggest that further studies are needed to explain the remaining variance in KC behaviors. The result may be because KC is considered a necessity for a knowledge-intensive organization such as the law enforcement agency under study (Collier, 2006). KC is part of the organization's core business, for example, investigations, which makes it more likely to be influenced by organizational enablers (such as TMS) than individual enablers (such as KSE).

Table III shows the relative impact of KD and KC behaviors of employees on the innovation capability of the organization. Together, KD and knowledge collection explain 13.8 per cent of the FIC, leaving 86.2 per cent of the variation unexplained. KC behaviors contribute 13.3 per cent of this explained variance, and KD behaviors just 0.5 per cent.

These findings are consistent with studies by Johnson *et al.* (1997) and Darroch and McNaughton (2002). They also suggest the need for future studies to explain the remaining variance. These findings point to a clear conclusion that KC affects FIC. However, there is no evidence that KD influences FIC in law enforcement agencies. A previous study by Lin (2007) showed that the effect of KD on FIC was less than that of

Table I.
The impact of knowledge self-efficacy (KSE) and top management support (TMS) on knowledge donating (KD) behaviors

Construct	R	R^2	D	β	p
KSE	0.431	0.186	0.0	0.380	0.000
TMS	0.527	0.277	0.091	0.307	0.000

Table II.
The impact of knowledge self-efficacy (KSE) and top management support (TMS) on knowledge collecting (KD) behaviors

Construct	R	R^2	D	β	p
TMS	0.587	0.344	0.0	0.547	0.000
KSE	0.631	0.399	0.055	0.236	0.000

KC, but still significant. The finding may be explained by Yi's (2009) suggestion that knowledge sharing is unidirectional, and consists only of data collection.

Table IV shows that five of the six study hypotheses were accepted. The study confirmed previous findings that knowledge sharing enablers (KSE and TMS) have a positive impact on both KC and KD in the context of a law enforcement agency in the UAE. It also found that KC has a positive effect on FIC while KD does not, especially in the law enforcement agency studied.

5. Conclusions

This study suggests that only KC behavior of employees significantly influences the innovation capability of the law enforcement agency under study. Both KD and KC behaviors are predicted significantly by employees' beliefs in their KSE and support from top management. The study confirms the bidirectional view of knowledge sharing (donating and collecting) in the context of the law enforcement agency in the UAE.

This study used a research model linking three dimensions of knowledge sharing, enablers, processes and outcomes. This model was introduced in previous studies such as Lin (2007) and Kumar and Rose (2012). The results of this study not only mostly agree with previous findings but also showed a unique set of results about the impact of knowledge sharing processes and outcomes in the context of law enforcement agencies in the UAE. This opens the door for researchers to improve the framework and develop refinements based on the same three-dimensional structure. This research paper is one of the first of which we are aware to study knowledge sharing in the UAE. Very few previous studies have examined knowledge sharing processes and outcomes in organizations in the UAE, particularly using research models.

Construct	R	R^2	D	β	p
KC	0.364	0.133	0.0	0.310	0.000
KD	0.372	0.138	0.005	0.093	0.034

Table III.
The impact of knowledge donating (KD) and knowledge collecting (KC) behaviors of employees on firm innovation capability (FIC)

Hypothesis	Result
H1. Employee willingness to collect knowledge significantly and positively correlates with employee willingness to donate knowledge	Accept
H2a. Knowledge self-efficacy positively influences employee willingness to donate knowledge	Accept
H2b. Knowledge self-efficacy positively influences employee willingness to collect knowledge	Accept
H3a. Top management support positively influences employee willingness to donate knowledge	Accept
H3a. Top management support positively influences employee willingness to collect knowledge	Accept
H4a. Employee willingness to donate knowledge positively influences firm innovation capability	Reject
H4b. Employee willingness to collect knowledge positively influences firm innovation capability	Accept

Table IV.
Hypothesis testing results

In terms of managerial implications, the relationship between knowledge sharing enablers and processes may help managers to determine how knowledge-intensive organizations in the UAE can promote a knowledge sharing culture to support innovation. The study may therefore help managers to create a successful knowledge sharing strategy (Lin, 2007). For example, it showed that both individual and organizational enablers such as KSE and TMS have a significant effect on KD and collection. It is therefore essential to emphasize the importance of knowledge sharing through top management as well as building an individual knowledge sharing culture among employees. The findings also showed that only KC affects FIC. KC, as part of a knowledge sharing process, must therefore be emphasized in creating a culture encouraging innovation diffusion projects and initiatives in law enforcement agencies.

No scientific study is limitation-free, including this one. Future studies in this domain should include a number of additional organizational variables, such as organizational culture, structure and rewards, trust or job security, to explain more about the KC and donating behaviors of employees. The study used linear stepwise multi-variable regression. Future studies might analyze the whole model in one-step using structural equation modeling, for example.

References

Ahmad, N. and Daghfous, A. (2010), "Knowledge sharing through inter-organizational knowledge networks – challenges and opportunities in the United Arab Emirates", *European Business Review*, Vol. 22 No. 2, pp. 153-174.

Ajzen, I. (1991), "The theory of planned behavior", *Organizational Behaviour and Human Decision Processes*, Vol. 50 No. 2, pp. 179-211.

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*, Vol. 11 No. 2, pp. 22-42.

Ardichvill, A., Page, V. and Wentling, T. (2003), "Motivation and barriers to participation in virtual knowledge-sharing communities of practice", *Journal of Knowledge Management*, Vol. 7 No. 1, pp. 64-77.

Bandura, A. (1982), "The assessment and predictive generality of self-percepts of efficacy", *Journal of Behavior Therapy and Experimental Psychiatry*, Vol. 13 No. 3, pp. 195-199.

Bandura, A. (1986), *Social Foundations of Thought and Action: A Social Cognitive Theory*, Prentice-Hall, Englewood Cliffs, NJ.

Bartol, K. and Srivastava, A. (2002), "Encouraging knowledge sharing: the role of organizational reward systems", *Journal of Leadership and Organization Studies*, Vol. 19 No. 1, pp. 64-76.

Bock, G. and Kim, Y. (2002), "Breaking the myths of rewards", *International Resources Management Journal*, Vol. 15 No. 2, pp. 14-21.

Cabrera, E. and Bonache, J. (1999), "An expert HR system for aligning organizational culture and strategy", *Human Resource Planning*, Vol. 22 No. 1, pp. 51-60.

Calantone, R., Cavusgil, S. and Zhao, Y. (2002), "Learning orientation, firm innovation, and firm performance", *Industrial Marketing Management*, Vol. 31 No. 6, pp. 515-524.

Cheng, Z. and Li, C. (2011), *Research on Relationship Between Knowledge Sharing and Team Performance in R and D Team*, Springer-Verlag, Berlin, CCIS 209, Part II.

Collier, P.M. (2006), "Policing and the intelligent application of knowledge", *Public Money & Management*, Vol. 26 No. 2, pp. 109-116.

Connelly, C. and Kelloway, E. (2003), "Predictors of employees' perceptions of knowledge sharing culture", *Leadership & Organization Development Journal*, Vol. 24 No. 5, pp. 294-301.

Constant, D., Kiesler, S. and Sproull, L. (1994), "What's mine is ours or is it? A study of attitudes about information sharing", *Information Systems Research*, Vol. 5 No. 4, pp. 400-421.

Crawford, C. (2005), "Effects of transformational leadership and organizational position on knowledge management", *Journal of Knowledge Management*, Vol. 9 No. 6, pp. 6-16.

Darroch, J. and McNaughton, R. (2002), "Examining the link between knowledge management practices and type of innovation", *Journal of Intellectual Capital*, Vol. 3 No. 3, pp. 210-222.

Davenport, T. and Prusak, L. (1997), *Working Knowledge: How Organizations Manage What They Know*, Harvard Business School Press Books, Boston, MA.

Davenport, T. and Prusak, L. (1998), "Learn how valuable knowledge is acquired, created, bought and bartered", *The Australian Library Journal*, Vol. 47 No. 3, p. 268.

Fishbein, M. and Ajzen, I. (1975), *Beliefs, Attitude, Intention and Behaviour: An Introduction to Theory and Research*, Addison-Wesley Publishing Company, Philippines.

Francis, D. and Bessant, J. (2005), "Targeting innovation and implications for capability development", *Technovation*, Vol. 25 No. 3, pp. 171-183.

Gruenfeld, D., Martorana, P. and Fan, E. (2000), "What do groups learn from their worldliest members? Direct and indirect influence in dynamic teams", *Organizational Behavior and Human Decision Processes*, Vol. 82 No. 1, pp. 45-59.

Hai, N.N. and Sherif, M. (2011), "Leadership behaviors, organizational culture and knowledge management practices", *The Journal of Management Development*, Vol. 30 No. 2, pp. 206-221.

Hall-Andersen, L. and Broberg, O. (2014), "Learning processes across knowledge domains", *Journal of Workplace Learning*, Vol. 26 No. 2, pp. 91-108.

Han, S., Seo, G., Yoon, S. and Yoon, D. (2016), "Transformational leadership and knowledge sharing mediating roles of employee's empowerment, commitment, and citizenship behaviors", *Journal of Workplace Learning*, Vol. 28 No. 3, pp. 130-149.

Hogel, M., Partboteeah, K. and Munson, C. (2003), "Team level antecedents of individuals knowledge networks", *Decision Sciences*, Vol. 21 No. 1, pp. 40-51.

Huber, G. (1996), "Organizational learning: a guide for executives in technology-critical organizations", *International Journal of Technology Management*, Vol. 11 No. 7, pp. 821-832.

Hurley, R. and Hult, G. (1998), "Innovation, market orientation, and organizational learning: an integration and empirical examination", *Journal of Marketing*, Vol. 62 No. 1, pp. 42-54.

Igbaria, M. and Iivari, J. (1995), "The effects of self-efficacy on computer usage", *Omega*, Vol. 23 No. 6, pp. 587-605.

Inkpen, A. (2000), "Learning through joint ventures: a framework of knowledge acquisition", *Journal of Management Studies*, Vol. 37 No. 7, pp. 1019-1043.

Jantunen, A. (2005), "Knowledge-processing capabilities and innovative performance: an empirical study", *European Journal of Innovation Management*, Vol. 8 No. 3, pp. 336-349.

Johnson, J., Meyer, M., Berkowitz, J., Ethington, C. and Miller, V. (1997), "Testing two contrasting structural models of innovativeness in a contractual network", *Human Communication Research*, Vol. 24 No. 2, pp. 320-348.

Karkoulian, S., Harake, N.A. and Messarra, L. (2010), "Correlates of organizational commitment and knowledge sharing via emotional intelligence: an empirical investigation", *The Business Review, Cambridge*, Vol. 15 No. 1, pp. 89-96.

Kumar, M. and Jaurhari, H. (2016), "Satisfaction of learning, performance, and relatedness needs at work and employees' organizational identification", *International Journal of Productivity and Performance Management*, Vol. 65 No. 6, pp. 760-772.

Kumar, N. and Rose, R.C. (2012), "The impact of knowledge sharing and Islamic work ethic on innovation capability", *Cross Cultural Management*, Vol. 19 No. 2, pp. 142-165.

Lawson, S. (2003), "Examining The relationship between organizational culture and knowledge management", Dissertation, Nova Southeastern Univeristy, Fort Lauderdale.

Lee, C.S. and Wong, K.Y. (2015), "Development and validation of knowledge management performance measurement constructs for small and medium enterprises", *Journal of Knowledge Management*, Vol. 19 No. 4, pp. 711-734.

Liao, S., Fei, W. and Chen, C. (2007), "Knowledge sharing, absorptive capacity and innovation capability: an empirical study of Taiwan's knowledge-intensive industries", *Journal of Information Science*, Vol. 20 No. 10, pp. 1-20.

Liebowitz, J. (2002), "Facilitating innovation through knowledge sharing: a look at the US naval surface warfare center-carderock division", *Journal of Computer Information Systems*, Vol. 42 No. 5, pp. 1-6.

Lin, H. (2006), "Impact of organizational support on organizational intention to facilitate knowledge sharing", *Knowledge Management Research and Practice*, Vol. 4 No. 1, pp. 26-35.

Lin, H. (2007), "Knowledge sharing and firm innovation capability: an empirical study", *International Journal of Manpower*, Vol. 28 Nos 3/4, pp. 315-332.

Lin, H. and Lee, G. (2004), "Perceptions of senior managers toward knowledge-sharing behaviour", *Management Decision*, Vol. 42 No. 1, pp. 108-125.

Lin, H. and Lee, G. (2006), "Effects of socio-technical factors on organizational intention to encourage knowledge sharing", *Management Decision*, Vol. 44 No. 1, pp. 74-88.

Lin, M. and Chen, C. (2008), "Intergration and knowledge sharing; tranforming to long-term competitive advantage", *International Journal of Organizational Analysis*, Vol. 16 Nos 1/2, pp. 83-108.

Luthans, F. (2003), "Positive organizational behavior: developing and managing psychological strengths", *Academy of Management Executive*, Vol. 16 No. 1, pp. 57-75.

MacNeil, C. (2004), "Exploring the supervisor role as a facilitator of knowledge sharing in teams", *Journal of European Industrial Training*, Vol. 28 No. 1, pp. 93-102.

Ness, J. and Søreide, G. (2014), "The room of opportunity: understanding phases of creative knowledge processes in innovation", *Journal of Workplace Learning*, Vol. 26 No. 8, pp. 545-560.

Noaman, A. and Fouad, F. (2014), "Knowledge sharing in universal societies of some develop nations", *International Journal of Academic Research*, Vol. 6 No. 3, pp. 205-212.

Politis, J. (2002), "Transformational and transactional leadership enabling (disabling) knowledge acquisition of self-managed teams: the consequences for performance", *Leadership & Organization Development Journal*, Vol. 23 No. 4, pp. 186-197.

Prince, M., Burns, D., Lu, X. and Winsor, R. (2015), "Knowledge and skills transfer between MBA and workplace", *Journal of Workplace Learning*, Vol. 27 No. 3, pp. 207-225.

Riggs, M.L., Warka, J., Babasa, B. and Betancourt, R. (1994), "Development and validation of self-efficacy and outcome expectancy scales for job-related application", *Educational and Psychology Measurement*, Vol. 54 No. 3, pp. 793-802.

Saleh, S. and Wang, C. (1993), "The management of innovation: strategy, structure and organizational climate", *IEEE Transactions on Engineering Management*, Vol. 40 No. 1, pp. 497-510.

Syed-Ikhsan, S. and Rowland, F. (2004), "Knowledge management in a public organization: a study on the relationship between organizational elements and the performance of knowledge transfer", *Journal of Knowledge Management*, Vol. 8 No. 2, pp. 95-111.

Tangaraja, G., Rasdi, R.M., Ismail, M. and Abu-Samah, B. (2015), "Fostering knowledge sharing behaviour among public sector managers: a proposed model for the Malaysian public service", *Journal of Knowledge Management*, Vol. 19 No. 1, pp. 121-140.

Tohidinia, Z. and Mosakhani, M. (2010), "Knowledge sharing behaviour and its predictors", *Industrial Management and Data Systems*, Vol. 110 No. 4, pp. 611-631.

Van der Rijt, P. (2002), *Precious Knowledge*, The Amsterdam School for Communications Research, Amsterdam.

van den Hooff, B. and de Ridder, J. (2004), "Knowledge sharing in context: the influence of organizational commitment, communication climate and CMC use on knowledge sharing", *Journal of Knowledge Management*, Vol. 8 No. 6, pp. 117-130.

von Krogh, G., Nonaka, I. and Rechsteiner, L. (2012), "Leadership in organizational knowledge creation: a review and framework", *Journal of Management Studies*, Vol. 49 No. 1, pp. 240-277.

Wang, Z., Wang, N. and Liang, H. (2014), "Knowledge sharing, intellectual capital and firm performance", *Management Decision*, Vol. 52 No. 2, pp. 230-258.

Wasko, M. and Faraj, S. (2005), "Why should I share? Examining social capital and knowledge contribution in electronic networks of practices", *MIS Quarterly*, Vol. 29 No. 1, pp. 35-57.

Witherspoon, C., Bergner, J., Cockrell, C. and Stone, D. (2013), "Antecedents of organizational knowledge sharing: a meta-analysis and critique", *Journal of Knowledge Management*, Vol. 17 No. 2, pp. 250-277.

WP2 Partners (2002), "Analysis of the state of the art, Deliverable D 2.1", State-Of-The-Art of Knowledge Management, Information Society Technologies, available at: http://rocket. vub.ac.be/public_drafts/rocket-d2.1-final-v1.pdf (accessed 16 August 2007).

Yang, J. (2007), "The impact of knowledge sharing on organizational learning and effectiveness", *Journal of Knowledge Management*, Vol. 11 No. 2, pp. 83-90.

Yeh, Y., Lai, S. and Ho, C. (2006), "Knowledge management enablers: a case study", *Industrial Management & Data Systems*, Vol. 106 No. 6, pp. 793-810.

Yesil, S. and Dereli, S. (2013), "An empirical investigation of the organisational justice, knowledge sharing and innovation capability", *Social and Behavioural Sciences*, Vol. 75 No. 1, pp. 65-81.

Yi, J. (2009), "A measure of knowledge sharing behavior: scale development and validation", *Knowledge Management Research and Practice*, Vol. 7 No. 1, pp. 65-81.

Zheng, C. (2009), "A correlational study of organizationa innovation capability and two factors: innovation drivers and organizational culture", Dissertation, University of Phoenix, Tempe, AZ.

Zumrah, A.R. (2013), "Is job satisfaction enhancing learning-training transfer relationship?", *Journal of Workplace Learning*, Vol. 25 No. 8, pp. 543-555.

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