Transferring Knowledge between Supervisors and Managerial Peer Groups: Falling at the trust hurdle

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By

Dr Adela J. McMurray Senior Lecturer Australian Graduate School of Entrepreneurship Swinburne University of Technology P O Box 218 Hawthorn Vic 3122 Australia +61 3 9214 5851

e-mail: amcmurray@swin.edu.au

David Baxter
PhD Candidate
Australian Graduate School of
Entrepreneurship
Swinburne University of Technology
P O Box 218 Hawthorn Vic 3122 Australia
+61 3 9214 8000

e-mail: dbaxter@swin.edu.au

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This abstract reports findings from an exploratory study that attempted to investigate the variables that impact on knowledge transfer between supervisors and managerial peer groups in organisations. Organisations rely on the dissemination of knowledge in order to drive their strategies, products and operations. This study suggests that cultural implications may impact on the transfer of knowledge in organisations.

This study adopted a social constructionist approach to the transfer of knowledge by using the social process of sharing knowledge and its effect on respondents' perceived innovation in organisations. The sample consisted of 106 MBA students. The response rate was 100% of which 96 were useable. Both public and private sector organizations were represented across a wide variety of industries with over 50 respondents being directors or managers.

A questionnaire comprising of 20 items consisting of open and closed questions was used; six were anchored to a 5 point Likert type scale, five were open, and two were closed requiring a yes or no answer. Seven items were included to collect demographic data. Quantitative data were analysed using descriptive statistics and qualitative data utilized category theme analysis.

All respondents reported a low level of trust in peers (m=3.1) but a slightly higher level in supervisors (m=2.9). The Asian group reported less trust of their peers (m=3.3). Respondents reported that supervisors (64%) and peers (67%) withheld knowledge and reported satisfaction with the quantity (47%) and quality (43%) of knowledge disseminated by supervisors and quantity (45%) and quality (37%) of knowledge disseminated by peers. Sorting the data by country of origin into non-Asian and Asian groups revealed differences in reported levels of satisfaction with the quantity and quality of knowledge disseminated by supervisors and peers. The non-Asian group reported a 50% rate of satisfaction with the quality of knowledge from supervisors, whereas the Asian respondents reported a 35% rate of satisfaction. The Asian population reported a high level of withholding knowledge by peers (74%), while non-Asians reported a high level of withholding knowledge by supervisors (66%).

Qualitative data was collected to show why supervisors and peers withheld knowledge and the respondent's emotional response. The category theme analysis revealed the following themes: anger, annoyance, alienation, frustration, lack of trust, and jealousy. The qualitative data showed that organisations promoted innovation (68%) through recognition, rewards and autonomy but that perceptions of innovation were culture specific.

The combination of high levels of withholding knowledge, low levels of dissatisfaction and mid levels of satisfaction by the Asian population, appears contradictory and raises a question – could these seemingly contradictory elements be a reflection of cultural values? A possible explanation of lower levels of trust in peers could be that respondents may be more willing to excuse supervisors for withholding knowledge than their peers consistent with belief perseverance phenomenon, or the respondents may be more accepting of the occurrence consistent with high power distance.

The possible implications for the transfer of knowledge in organisations with multi-cultural workforces are discussed. Further study of country of origin as a means of identifying values in the social process of knowledge transfer may prove useful in greater understanding of management behaviour.

 $Key\ words:\ Knowledge\ Transfer,\ Country\ of\ Origin,\ Trust,\ Innovation$

Introduction

This multi-method study reports findings from an exploratory study that attempted to investigate the variables that impact on knowledge transfer between supervisors and managerial peer groups in organisations. Organisations rely on the dissemination of knowledge in order to drive their strategies, products and operations. This study suggests that cultural implications may impact on the transfer of knowledge in organisations.

This study adopted a social constructionist approach to the transfer of knowledge by using the social process of sharing knowledge and its effect on perceived innovation in organisations. The sample consisted of 106 MBA students. With a 100% response rate, the data collected covered 19 Countries of Origin (COO) in a population of 106 respondents of which 96 were useable. Of the respondents, 50 were non-Asian, including Australian (38), European (13) and South African (1), and 46 were Asian, the largest representations being from India (18), China (9), Thailand (6) and Malaysia (6). Both public and private sector organizations were represented across a wide variety of industries.

Knowledge Management

Knowledge management (KM) literature has proliferated over recent years and has involved many disciplines (Wiig, 2000). 'Knowledge' has been taken out of the hands of the philosophers and placed in the safer keeping of a variety of other experts according to Hull (1999), who also cautions against the use of knowledge as a unit of analysis for the dynamics of companies, organizations, economies and societies. While interest in KM is increasing and organizations are becoming more focused on managing their knowledge assets, Murray (2000) says it is relatively early in the development of KM to judge the merits of KM programs. In their brief critique of the KM literature, McAdam & McCreedy (1999) have noted three types of KM model in use. These include knowledge as categorised in discrete elements (Nonaka & Takeuchi, 1995); knowledge represented as intellectual capital (Chase, 1997; Roos & Roos, 1997); knowledge and the KM process as a socially constructed phenomenon (Demerest, 1997). Knowledge is better understood as a social process rather than a functional resource (Alvesson, 1998). The definition of knowledge used in organisations has been shown to include a social constructionist element that recognises the social elements in knowledge creation, embodiment and use (McAdam & McCreedy, 1999; Clegg et al., 1996; Alvesson & Wilmott, 1996). Furthermore, Grover & Davenport (2001) draw attention to the importance of social interaction in converting tacit knowledge into explicit knowledge as part of the innovation process. Nonaka et al. (2000, p. 9) assert that "tacit knowledge can be acquired only through shared experience, such as spending time together..." and this is irrespective of whether or not the tacit knowledge is then converted into explicit knowledge or remains tacit.

It has been suggested by Maula (2000), that the conventional definition of knowledge, based on the writings of Polanyi (1967) and Nonaka and Takeuchi (1995), is insufficient. A firm's knowledge can be more usefully classified into highly structured explicit knowledge, less-structured explicit knowledge and tacit knowledge. A scientific definition of knowledge, comprising of facts or information, has been shown to be an inaccurate reflection of the use of the term in practice. Demerest (1997) draws a distinction between the goals of philosophical and scientific knowledge (truth or what is right) and commercial knowledge (effective performance or what works). He goes on to offer a definition of knowledge that includes "actionable information embodied in the set of work practices, theories-in-action, skills, equipment, processes and heuristics of the firm's employees" (Demerest, 1997, p.374).

Trust

Within the social processes that facilitate knowledge transfer (KT), trust has been seen to be "the single most important precondition for knowledge exchange." (Snowden, 2000, p.239) and is a KM issue both at the individual and group levels (Murray, 2000). Kramer (1999), referring to recent research by Coleman 1990, Fukuyama 1995, Kramer & Tyler 1996 and others, have observed that within the field of organizational behaviour there has been a resurgence of interest in the role of trust as a determinant of intra-organizational cooperation, coordination and control. Interest in trust as a factor in the social processes of KT becomes more important then, when we consider the value of KT in innovating to create competitive advantage. Srica (2002) sets out seven principles for the effective management of innovation including monitoring various sources of knowledge.

Innovation

Abraham and Knight (2001) maintain that the strategic innovation cycle in an organization helps to create knowledge, transform knowledge from tacit to explicit, and enables knowledge, as an output from the cycle, to be shared so that it can be used in future innovation cycles. They contend that a top-down, bottomup structure best promotes systematic knowledge creation and recommend a leveraging condition they call 'spreading resources' as a condition that includes technological and social processes to make knowledge widely available. KM is emerging as a subset of the larger emerging paradigm of post-capitalist deregulated organizations (McAdam and McCreedy, 1999) and is viewed as a way to increase organizational competitiveness (DeTienne & Jackson, 2001) because there is an opportunity to leverage the accumulated knowledge in an organization. Furthermore, the competitive advantage of firms is becoming increasingly viewed as dependent on the management of knowledge assets that must be exploited within firms so that full value may be realised (Teece, 2000). Invisible assets that create knowledge and help position a firm to exploit new opportunities, enhance continuous innovation (Johannessen et al. 1997). They propose that invisible assets, in particular, tacit knowledge, which is skill-based and people intensive, enhance innovation and limit imitation and thus are the most important factors in explaining sustained competitive advantage. Lengnick-Hall (1992) notes that in order to achieve and maintain competitive advantage, firms formulate innovation strategies. However, innovation often means that knowledge, skills and abilities needed for organizational effectiveness, will have to change. In their research, Johannessen et al. (1997) concluded that industrial organization theory and resource-based theory may complement each other in determining how firms can innovate for competitive advantage. Central to their consideration of both approaches is the presence of interactive learning, knowledge creation and knowledge integration that lead to continuous innovation.

Country of Origin

An understanding of the international dimensions of management is vital to effective management in the 21st century (Punnett & Shenkar, 1996). This is true because organizations are increasingly integrating across national borders and organizations within countries such as Australia comprise multicultural workforces. This requires the ability of managers to see the relativity of their own cultural frameworks to others in an organization and improve their intercultural management skills (Hofstede, 1996). Recent research in the area of cross-cultural management may be helpful in this regard. For example, four attributes have been identified that may be the universal dimensions of the constructs of individualism and collectivism, which are characteristic of western and eastern cultures respectively (Triandis, 1999). Firstly, there is definition of the self, wherein collectivists view the self as interdependent with others and individualists view the self as autonomous and independent. Secondly, structure of goals in collectivist cultures is compatibility between individual and in-group goals whereas individualists' goals do not often correlate with in-group goals. The third attribute is emphasis on norms versus attitudes. Here the determinants for the social behaviour among individualists are attitudes, personal needs, perceived rights and contracts while collectivists' behaviour is determined equally by a) norms, duties and obligations and b) attitudes and personal needs. Finally, individualists emphasise rationality, cost benefit analysis of relationships, while collectivists emphasise unconditional relatedness. In his seminal research on national cultures, Hofstede (1984) identified that 53 cultures differed mainly along four dimensions. Power distance is the equilibrium of inequality established in a society by leaders and followers. Individualism versus collectivism, that is, the degree to which individuals are integrated into groups. The third dimension is masculinity or assertiveness versus the nurturing characteristic of femininity. Lastly, uncertainty avoidance refers to the extent to which a culture programs its members to feel either comfortable or uncomfortable with unstructured situations. Hofstede and Bond (1988) further identified a uniquely eastern dimension in Chinese culture they referred to as Confucian Dynamism, which is to do with a society's search for virtue. Hofstede and Bond (1988) maintain that cultural differences in these dimensions have consequences for organizations particularly those managing multicultural workforces. For example, the most effective leader in a low power distance culture would be a resourceful democrat, whereas in a high power distance culture it would be a benevolent autocrat.

Research questions

Within the context of a multicultural workforce, the authors believe that if, as has been suggested, KM is a social process, and its success is dependent upon the trust relationships between people in an organization so that they willingly transfer their tacit knowledge to each other, then it would be useful to explore the following questions. Do people have different expectations of their supervisors and peers regarding

knowledge transfer, depending on their cultural backgrounds? How much do people from different cultural backgrounds and working in organizations trust their supervisors and peers? Does the withholding of knowledge by supervisors and peers have different effects on people because of their cultural background?

Methodology

A sample of 106 MBA students, including over 50 managers and directors, of various ages and cultural backgrounds participated in the study.

Instrument Development

A survey instrument, administered in English, consisted of 20 items including open and closed questions to collect both quantitative and qualitative data. Four questions relating to the quantity and quality of disseminated tacit knowledge were anchored to a Likert type scale from 1 = highly dissatisfied to 5 = highly satisfied. Two questions relating to trust were anchored to a Likert type scale from 1= Always to 5 = never. Two questions relating to withholding knowledge required a yes or no answer and five open ended questions required responses relating to reasons for withholding knowledge, emotional responses and the promotion of innovative behaviour by the respondent's organisation. Seven items were included to collect demographic data including gender, age, country of origin and country of origin of parents, type of organisation and industry and tenure in reported organisational role. Some of the questions were based on the Organizational Commitment Questionnaire (Mowday et al., 1979), Allen and Meyer's organisational commitment scale (1990) and others, were developed by the authors using KT as a theme. The instrument was administered to the respondents in two groups with the authors present to provide explanation and assistance as required. An introductory explanation of the survey and its purpose was provided. Quantitative data was analysed using descriptive statistical procedures and qualitative data was analysed using a category theme analysis by defining the words and then collapsing them into categories. Responses to the questions about innovation were categorized using Srica's (2002) seven principles of effective innovation management.

Analysis

Of the 96 useable responses, 50 of the respondents reported as being born in non-Asian countries and 46 born in Asian countries. A descriptive statistical analysis was undertaken combining the responses to questions within the categories of KT, trust and withholding knowledge and comparing the data from Asian and non-Asian students.

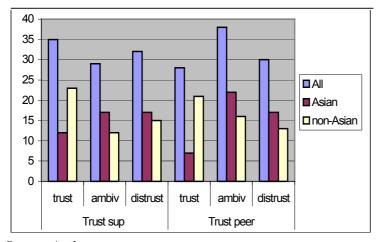


Figure 1: Trust of supervisors and peers

Source: Authors

Respondents were asked if they trusted supervisors and peers to keep something in confidence. The responses to the questions were combined to provide an overall analysis. As with the KT questions, there was a high report of ambivalence from Asians (42%). This group also reported a low trust level (21%) and just over one third reporting trust of supervisors and peers. In contrast, 44% of non-Asians (more than

double the reporting level of the Asian group) reported trust of supervisors and peers with less than 30% reporting ambivalence and distrust. Figure 1 represents reporting of trust by Asians and non-Asians.

Results

The data shows both Asians and non-Asians report higher levels of trust of supervisors then peers. The level of trust of peers reported by non-Asians is significantly higher than the Asian group who also report higher levels of ambivalence and distrust of peers compared to the non-Asians. The analysis in figure 1 shows that respondents reported that supervisors could be trusted more to keep something confidential than peers. Trust of supervisors was reported by twice as many non-Asians compared to Asians and the disparity in levels of trust of peers was even greater with three times as many non-Asians compared to Asians reporting that they trusted their peers. Lower levels of distrust of supervisors and peers were reported by non-Asians compared to Asians. As with the questions related to KT, a much higher level of ambivalence towards peers was reported. Distrust of supervisors (33%) was slightly higher than that for peers (31%). Respondents were asked how satisfied they were with the quantity and quality of KT from supervisors and peers. Overall, 41% of Asians reported ambivalence, 40% satisfied and 19% dissatisfied, whereas 46% of non-Asians were satisfied, 33% ambivalent and 21% dissatisfied. The data was analysed in Figure 2 by examining the responses to each of the four questions dealing with KT from supervisors and peers and shows the level of satisfaction among Asians and non-Asians with quantity and quality of KT from supervisors and peers.

50 45 40 35 30 25 Asian 20 15 □ non-Asian 10 5 Satis Satis Neither Diss Satis Diss Satis Neither Diss Neither Neither Q1 Q2 Q3 Q4

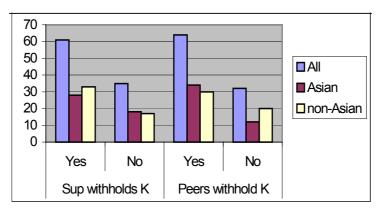
Figure 2: Satisfaction with KT

Source: Authors

The combined data from both groups revealed that the highest levels of satisfaction (45 respondents), dissatisfaction (25) and the lowest level of ambivalence (26) were with the quantity of KT from supervisors. The highest levels of reporting by non-Asians, related to satisfaction with the quality of KT from supervisors (25) and quantity of KT from peers (25). The highest level of reporting from Asians was ambivalence towards the quality of KT from peers. There were higher levels of satisfaction with quantity rather than quality reported and the highest levels of ambivalence were related to KT from peers. Both Asian and non-Asians report similar levels of dissatisfaction with peers. However, non-Asians report higher levels of satisfaction while Asians report higher ambivalence. Dissatisfaction was higher with supervisors than peers in the combined data and in the data from each group.

A higher proportion of Asian (67%) compared to non-Asians (63%) reported that supervisors and peers withheld knowledge. Figure 3 was used to analyse the data regarding belief that supervisors and peers withhold knowledge and the differences in responses from the Asian and non-Asian groups.

Figure 3: Belief that knowledge is withheld



Source: Authors

As illustrated in figure 3, reporting that supervisors withheld knowledge was higher amongst non-Asians, whereas a greater number of Asians reported that peers withheld knowledge. The highest level of reporting by either group was by Asians who reported that their peers withheld knowledge. The lowest level of reporting was from Asians believing that peers did not withhold knowledge. Qualitative data was collected from the open questions to show why respondents believed supervisors and peers withheld knowledge and the respondents' emotional responses. Responses to four open questions were analysed and are represented in the table below.

Table 1: Reasons why supervisors and peers withhold knowledge

	Asian	Non-Asian
Reasons why supervisors	Competition (19%)	Need to know/ confidentiality
withhold knowledge	Power (14%)	(24%)
		Power/ control (24%)
		Unthinking/ uncertainty (15%)
		(34 responses = 68% of non-
	(21 responses = 46% of Asians)	Asians)
How the respondents felt when	Frustrated (45%)	Annoyed (27%)
supervisors withheld knowledge	Hurt (29%)	Frustrated (22%)
		(45 responses = 90% of non-
	(31 responses = 67% of Asians)	Asians)
Reasons why peers withhold	Competition (27%)	Self-interest (16%)
knowledge	Jealousy (15%)	Need to know (13%)
		(31 responses = 62% of non-
	(26 responses = 57% of Asians)	Asians)
How the respondents felt when	Frustrated (29%)	Angry (31%)
peers withheld knowledge	Annoyed (25%)	Frustrated (23%)
		(39 responses = 78% of non-
	(28 responses = 61% of Asians)	Asians)

Source: Authors

Table 1 shows the most frequent responses by Asians and non-Asians to each question and the percentage of all responses to that question in brackets. In addition, the number of responses to each question is included with the percentage of the Asian and non-Asian group. The highest level of response was from Asians (67%) and non-Asians (90%) reporting their emotions when supervisors withheld knowledge.

Asians reported that supervisors withheld knowledge for reasons of competition and power and peers withheld knowledge for reasons including competition and jealousy. Non-Asians reported that supervisors withheld knowledge for reasons of 'need to know' and power and control and peers withheld knowledge for reasons of self-interest and 'need to know'. Asians reported frustration (45%) and hurt (29%) when supervisors withheld knowledge, whereas non-Asians reported annoyance (27%) and frustration (22%). When peers withheld knowledge, Asians reported feelings of frustration (29%) and annoyance (25%) whereas non-Asians felt angry 31%) and frustrated (23%). Significant levels of reporting of frustration and annoyance were common to both groups, however, hurt (which is related to humiliation and loss of face) was peculiar to the Asian group and anger was peculiar to the non-Asian group.

Of the Asians (80) who responded to the questions about how their organization promotes innovation, 35% reported that their organization used rewards and recognition and 16% reported flexible organizational arrangements with only 3% reporting that their organization does not promote innovation. In contrast, 32% of the non-Asians (98% response rate to the questions) reported that their organization does not promote innovation, 14% reported their organization sought new opportunities and more innovative approaches and 10% used recognition and rewards.

The data was further analysed to compare levels of trust, withholding knowledge and knowledge transfer between organizations that were reported to promote innovation and those that did not. Within the non-Asian group the comparison was significant wherein those who reported belonging to organizations that did not promote innovation (32% of non-Asians) also reported a higher level of withholding knowledge by supervisors but lower level of withholding knowledge by peers. There was also a lower level trust of supervisors, higher distrust of supervisors, higher trust of peers and lower distrust of peers. Dissatisfaction with the quality of KT from supervisors was higher by a factor of nine and with quantity of KT, higher by a factor of five. Dissatisfaction was also higher with KT from peers. There was significantly less satisfaction with both quantity of KT from supervisors and peers and quality of KT from supervisors. Interestingly, there was higher satisfaction with the quality of KT by peers.

Findings

We began this study by asking three questions related to KT, trust, and withholding knowledge by supervisors and peers, and we were interested in identifying cultural differences in the respondents' answers.

This exploratory study has indicated some differences that appear to be culturally based and consistent with Hofstede's (1984) identification of Asian cultures generally characterized by high Power Distance whereby Asian respondents are less trusting of supervisors and peers than non-Asians. The non-Asians report higher levels of withholding knowledge by supervisors (not peers), but appear to be more ready to see this in a positive way than the Asians who report competitiveness as a reason for the occurrence. Asians seem to have a very broad definition of what constitutes innovative behaviour. The study has demonstrated that people have emotional responses when knowledge is withheld by their supervisors and peers. When asked a question requiring a rational answer and a question about emotions, in

supervisors and peers. When asked a question requiring a rational answer and a question about emotions, in relation to withholding knowledge, those surveyed responded with greater frequency to the emotional question. This is an inconsistency and the qualitative data collection would have been enhanced through interview rather then survey. The dominant methodology in the literature was the use of surveys.

Conclusions

The literature suggests that KM is a social process whose success is dependent on trust relationships. We have used KT as a theme and attempted to establish a relationship between trust, the respondents' satisfaction with KT, the withholding of knowledge and innovative organisations. The data suggests that expectations and responses across these dimensions differ, depending on cultural background. This exploratory study has found lower levels of trust and higher levels of distrust of supervisors and peers among Asians compared to non-Asians. This is consistent with the literature where previous research shows that in countries with high power distance, one's power is seen as potentially under threat from others and so that they can rarely be trusted. Whereas in low power distance countries people are more likely to trust others as they feel less threatened. The consistency is further reinforced because Asians reported competition, power and jealousy as reasons why knowledge was withheld by supervisors and peers, compared to non-Asians who reported "need to know", power and self-interest as reasons why supervisors and peers withheld knowledge. The "need to know" response from non-Asians maybe a more

positive response as it indicates an understanding and acceptance that knowledge may be withheld for a legitimate business reason.

The concept of innovation may be problematic across cultures as some responses from the Asian group included a six-monthly meeting, meetings and one hour per day coaching staff as means by which organizations promote innovation. Further investigation of this issue should include constructing meanings of innovation across cultures.

Finally, in answering all three research questions the implication from this exploratory study for managers appears to be that the height of the trust hurdle they have to straddle varies across cultures.

Limitations

This study is limited by virtue of the small sample size. It is therefore recommended that future research in this area should involve a multi-methodology study on a larger sample.

All questionnaires were administered in English. Whilst it was presumed that the standard of comprehension and articulation of English was sufficient for the conduct of the research, because the survey population comprised MBA students, the use of English demonstrated in the responses in Table 1 indicate that the transportability of concepts across cultures may be problematic.

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