

## THE EFFECT OF AFFECT-BASED AND COGNITION-BASED TRUST

The effect of affect-based and cognition-based trust on the sharing and use of tacit knowledge

Naveed Yazdani

University of Management and Technology, Lahore

[Spa.dir@umt.edu.pk](mailto:Spa.dir@umt.edu.pk)

Adnan Siddique

University of Management & Technology, Lahore

[Adnansid11@gmail.com](mailto:Adnansid11@gmail.com)

This paper has been presented in the



organized by

School of Business and Economics

University of Management and Technology, Lahore, Pakistan

This paper has been included in the conference proceedings with good intentions, where the conference and its organizers are not liable at all for the contents of this paper and / or any part of it. For more information about the conference please visit the conference website: <http://cgr.umt.edu.pk/icobm2013/index.html> or write the organizers at [icobm@umt.edu.pk](mailto:icobm@umt.edu.pk)

## ABSTRACT

In this era of knowledge economy when knowledge is considered the most important resource for gaining sustainable competitive advantage, it is necessary for organizations to leverage this resource. Organizations should build interpersonal trust among their employees so that the tacit knowledge which resides in their employees is utilized. The interpersonal trust is of two type's i.e. affect-based and cognition-based trust. This study finds the effect of alternative types of trust on the willingness of employees to share and use tacit knowledge using a sample of 102 respondents from different business organizations. The findings support the hypothesis that both type of trust i.e. affect-based and cognition-based trust is important in determining the willingness of employees to share and use their tacit knowledge. Research limitations are discussed in the end.

Key Words: Interpersonal trust, affect-based and cognition-based trust, tacit knowledge, willingness to share and use tacit knowledge.

## INTRODUCTION

Knowledge has become a prominent sign of global economy because of its impact on the global and national economic growth (Lin, 2007). Therefore, today it is considered as the most important resource for the organizations (Choe, 2004) for gaining sustainable competitive advantage (Desouza, 2003; Nonaka & Takeuchi, 1991). A number of organizations are concerned about leveraging this resource for the benefit of their organization. In order to benefit from this resource, which is largely an invisible asset (Kakabadse, Kouzmin, & Kakabadse, 2001), more and more organizations and executive leaders are making investments in databases and information technology to capture and use it (Hsu, Ju, Yen, & Chang, 2007; Ruggles, 1998; Stenmark, 2001). The problem that lies in the use of information technology is that it allows the organization to store, share and use explicit knowledge which has been codified by the organization in the form of documents, reports, and patents. (Holste & Fields, 2010). Whereas tacit knowledge, which is highly personal and difficult to articulate, requires interpersonal and face-to-face interaction for its sharing and use (Grover & Davenport, 2001; Nonaka, 1994; Zack, 1999). Furthermore, in spite of the growing easiness of access to online information, employees usually approach their peers and colleagues for necessary knowledge (Abrams, Cross, Lesser, & Levin, 2003; Lin, 2007).

Employees share their tacit knowledge with other organizational members only when they have trust in them (Abrams, et al., 2003; Locke, 1999; Lucas, 2005). Lewis and Weigert (1985) argued that trust is a social phenomenon which resides in the relationship among the people and is not an individual characteristic. Lin (2007) in his study found that when there is low level of organizational commitment and trust between the co-workers then the sharing of tacit knowledge among co-workers is usually low. Similarly, Chowdhury (2005) also found that the level of trust between the dyad within a team positively affect the sharing of complex knowledge among them.

Previous studies have shown that trust is multidimensional in its nature (Abrams, et al., 2003; Levin & Cross, 2004; Lewis & Weigert, 1985; McAllister, 1995). McAllister (1995) proposed that there are two types of interpersonal trusts i.e. affect-based trust and cognition based trust. He argued that affect-based trust exists between employees when there is emotional bond, reciprocal care and loving feelings and relationships among the colleagues. However, cognition-based trust exists when organizational members rely on others' competencies and skills.

Previous studies have observed the role of trust in general on the sharing of tacit knowledge in alliances (Becerra, Lunnan, & Huemer, 2008), virtual communities (Hsu, et al., 2007), and teams (Politis, 2003). A few studies have examined the different kind of trust on the knowledge sharing (Chowdhury, 2005). Only Holste and Fields (2010) studied the effect of affect and

cognition-based trust not only on willingness to share tacit knowledge but also the willingness to use tacit knowledge among employees. However, they conducted their study on the professionals and managers of an international non-profit organization. But there are practical and ideological differences between the working of a non-profit organization and for profit organization (Hull & Lio, 2006). The key responsibilities of business organizations are to earn maximum profit (Friedman, 2007) whereas non-profit organizations work for the social welfare of the people and profit is not their main aim. Further, their study was also limited to one organization and therefore could also have generalizability issue. So, there is need to find how alternative types of trust affect the sharing and use of tacit knowledge among the employees of business organizations.

The main objective of this study is to find out the impact of affect-based and cognition-based trust on the willingness of employees, from business organizations, to share and use tacit knowledge with their colleagues. This study will help to support or disaffirm the prior studies conducted. Since, no such important study has been conducted in the context of Pakistan, so this study will also try to fill this gap. The main research question of this study, therefore, is:

Research Question: What is the effect of affect-based and cognition-based trust on the willingness of employees to share and use tacit knowledge in the business organizations of Pakistan?

## LITERATURE REVIEW

Knowledge is considered the most important resource for gaining sustainable competitive advantage but this knowledge is of no great use if it remains captured in individual and is not shared with the organizational members (Nonaka & Takeuchi, 1995). Literature on knowledge management heavily draws on the Michael Polanyi's (1966) distinction between explicit and tacit dimensions of knowledge. Explicit knowledge refers to that knowledge which can be codified into words, numbers, codes databases etc and is transferred in formal and systemic way (Nonaka, 1994).. Michael Polanyi (1966, p. 4) rightly said, "We can know more than we can tell". It is easy to articulate explicit knowledge and it represents only the tip of the iceberg of knowledge that a person possesses. Procedural manuals, product manuals, computer software, mathematical formulas, patents, and codes are examples of explicit knowledge (Nonaka & Takeuchi, 1991; Zack, 1999). Information technology is being used by many organizations to manage their explicit knowledge (Nonaka, Umemoto, & Senoo, 1996).

Tacit knowledge, as opposed to explicit knowledge, is difficult to articulate as it is highly personal, subjective, understood subconsciously, difficult to articulate, deeply rooted in action and context and is also hard to formalize (Choo, 1996; Haldin-Herrgard, 2000; Holste & Fields,

2010; Nonaka, 1994; Zack, 1999). If explicit knowledge is tip of the iceberg then tacit knowledge is the rest of the iceberg. Since tacit knowledge is highly personal and difficult to articulate so it can only be transferred with face-to-face interaction (Nonaka, 1994). Haldin-Herrgard (2000) argued that a great effort has been made in technology to manage explicit knowledge but there has been a limited focus on the management of tacit knowledge. Tacit knowledge is very important for organizations as it plays a vital role in the strategic decision-making process (Brockmann & Anthony, 1998).

Since tacit knowledge cannot be easily articulated into words so it requires face-to-face interaction between the people (Haldin-Herrgard, 2000; Nonaka & Takeuchi, 1995). Employees abstain from sharing their knowledge as they realize that knowledge is power and sharing knowledge will reduce their value and power (O'Neill & Adya, 2007). Employees share their tacit knowledge with other organizational members only when they have trust in them (Abrams, et al., 2003; Locke, 1999; Lucas, 2005; O'Neill & Adya, 2007). When there is no interpersonal trust, people do not share knowledge despite any formal requirements for sharing knowledge (Andrews & Delahaye, 2000). So, there's need of an element of interpersonal trust between the employees to help them share and use their knowledge with their colleagues.

Lewis (1985) argued that previous researchers have taken trust as an individual property rather than intersubjective characteristics. He argued that trust does not exist in isolated individuals rather it resides in the relations among people. He also argued that trust has emotional and cognitive dimension. Interpersonal trust can be defined in terms of "the extent to which a person is confident in and willing to act on the basis of, the words, actions, and decisions of another" (McAllister, 1995, p. 25). As trust is multifaceted in nature (Abrams, et al., 2003; Lewis & Weigert, 1985), McAllister proposed that trust could be affect-based or cognition-based. He argued that cognition-based trust exists when one is being trusted because of his/her cognitive abilities, competencies, reliability and dependability, experience and quality of work. For example, when we trust on someone because of his superior knowledge and experience in the field we have cognition-based trust. Affect-based trust on the other hand is founded on the emotional ties among the individuals. Such kind of trust rises out of mutual care and concern and loving feelings for each other. So, affect-based trust encourages social relationships while cognition-based trust encourages professional association among the employees (Chowdhury, 2005).

Chowdhury (2005) argued that both types of trust are important and are independently significant predictors of complex knowledge sharing. He found that alternative types of trust affected the tacit knowledge sharing within dyads. Becerra et al., (2008) discovered that sharing of tacit knowledge among the alliances is closely related with the perception of the

trustworthiness. They argued that when the level of trust is high among the alliance partners then sharing of tacit knowledge among them will be high. Holste and Fields (2010) also found in their study that the willingness of professional workers to share and use tacit knowledge is affected by the affect and cognition-based trust. They found that the affect-based trust among the employees encourages them to share their tacit knowledge with them while the reliance on the cognitive and professional competence motivates them to use tacit knowledge. Based on previous literature, this study proposes the following hypothesis:

H1: Affect-based trust and cognition-based trust among employees positively affect their willingness to share and use tacit knowledge.

## METHODOLOGY

This paper employs the quantitative research paradigm and treats the data in positivistic manner. An empirical approach is adopted to conduct the study and test the hypothesis. All results are examined objectively and without any biasness using the questionnaire method and statistical tests.

### Population and Sample Design

The population of interest of this paper is the business organizations which are in the service sector operating in the boundaries of Lahore. As explained earlier, Holste and Fields (2010) have conducted their study on the professionals of non-profit organizations, so this study targets business organizations in general and service organizations in particular to test the hypothesis. Knowledge sharing in the service organizations is more important than other organizations as it is their knowledge on the basis of which they compete. So, as explained above, to share knowledge interpersonal trust is important. Therefore, this study focuses on service organizations to test hypothesis. A total of 106 responses are obtained from employees of different service organizations using convenience sampling method. 4 responses were incomplete so those were removed leaving a sample size of 102 responses in total. The individual employee in the organization is the unit of research in this study.

## RESEARCH METHOD

It is a cross-sectional study. Cross-sectional study collects the data at one point of time in the study. Questionnaire method is adopted to collect the data needed for the research. Measures of willingness to share and use tacit knowledge, both consisting of four-item measures, is adopted from Holste and Fields (2010) and modified to generalize those items. Cronbach's alpha is measured of these modified items to find out their validity and reliability statistics. Cronbach's alpha for willingness to share tacit knowledge is 0.7 while for willingness to use tacit

knowledge it is 0.66 based on standardized items. The general rule of thumb for Cronbach's value is that the value which is less than 0.7 but greater than 0.6 is acceptable but it should be used with caution (Nunnally, 1978). Measures for affect and cognition-based trust are adopted from Chowdhury (2005) which both consisted of five items. Cronbach's alpha for affect-based trust is 0.76 whereas for cognition-based trust it is 0.72. Respondents are asked to rate their responses on a five point Likert scale ranging from 1 "strongly agree" to 5 "strongly disagree". The data was collected from the respondents using the survey questionnaire.

### Control Variables

Few studies have suggested that level of trust varies in different age groups (Sutter & Kocher, 2007). Sutter and Kocher (2007) argued that the level of trust increases from childhood to adulthood in a linear fashion it remains constant among different age groups. So, age of the respondent might affect the relationship. It is also discovered that the friendships of identical gender are more intimate, close and trusting in women as compared to men (Aukett, Ritchie, & Mill, 1988). So, women may feel more inclined sharing and using their knowledge with women as compared to men. Holste and Fields (2010) suggested that tenure of an employee at an organization may also affect his willingness to share. Those who have spent longer time in an organization will be more willing to share their knowledge as compared to using it. So, in this study age, gender and tenure at an organization are used as control variables. Willingness to share and use tacit knowledge is the dependent variable whereas affect and cognition-based trust is independent variable used in the study. Following model is proposed based on this study:

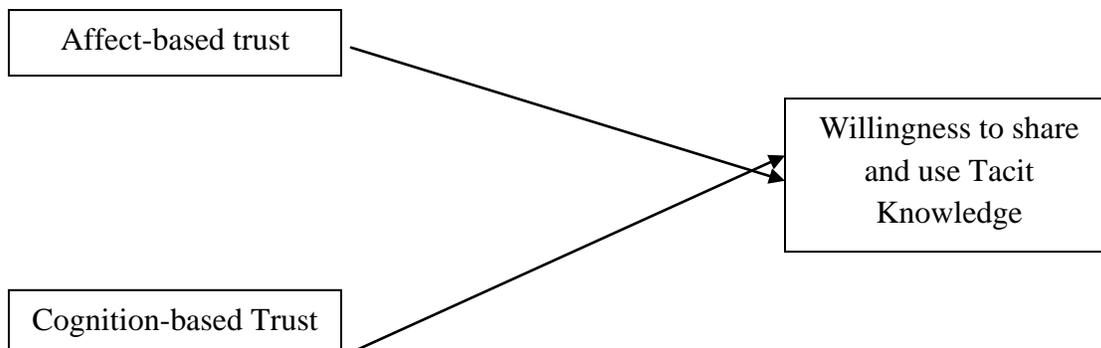


Figure 1: The effect of affect and cognition-based trust on the willingness to share and use tacit knowledge.

### Results

Nature of the data is being checked by using descriptive statistics and binary correlations among all the variables used in this study (see in Table 1). The results show a significant correlation among the independent variables, affect and cognition-based trust, and

dependent variables, willingness to share and use tacit knowledge. This suggests that there might exist a problem of multicollinearity among the items of independent variables. However, there is no significant relationship of control variables with the independent and dependent variables except age which might affect the willingness to share knowledge. This means control variables may not affect the relationship. Lastly, the correlation matrix shows that there does exist a significant correlation among the independent and dependent variables. This shows that there may be a strong relationship among the independent and dependent variables.

Table1: Means, Standard deviations, and correlations among study variables (n = 102)

Variables	Mean	SD	1	2	3	4	5	6	7
1. Gender	1.1765	.3831	1						
2. Age	1.9608	.6121	-.097	1					
3. Tenure	2.8431	.9824	-.084	.648**	1				
4. Affect-based trust	11.0392	3.0698	.002	.059	-.070	1			
5. Cognition-based trust	11.2451	2.7626	.052	.029	.007	.599**	1		
6. Willingness to share TK	8.5686	2.6607	.037	.214*	.072	.590**	.417**	1	
7. Willingness to use TK	7.9902	2.2138	.084	.000	-.101	.571**	.459**	.646**	1

Notes: \*\* Correlation is significant at the 0.01 level  
0.05 level

\* Correlation is significant at the

Coded, male = 1 and female = 2

Hierarchical multiple regression analysis is used to test the hypothesis. The findings of analysis are given in Table 2. As predicted in the correlation matrix, the results show that the control variables do not have much influence and impact on both the regression models. The findings also show that alternative types of interpersonal trust have a significant effect on the willingness of employees to share and use tacit knowledge. The results also indicate that the affect-based trust has more impact on the willingness of employees to share their tacit knowledge as compared to their willingness to use it. On the other hand, results show that cognition-based trust has more impact on employees' willingness to use knowledge as compared to their willingness to share it. The multicollinearity and autocorrelation statistics are also within their

Table 2: Regression model predicting tacit knowledge share and use

Variables	Tacit Knowledge Share				Tacit Knowledge Use			
	R <sup>2</sup>	Durbin-Watson	beta	VIF	R <sup>2</sup>	Durbin-Watson	beta	VIF
Gender								
Age								
Tenure								
Total	0.057				0.024			
Affect-based trust	0.326**	1.998	0.578	1.024	0.312**	2.380	0.565	1.024
Cognition -based trust		0.166**	1.899	0.408	1.004	0.205**	2.007	0.454
	1.004							

Notes: \*\*p < 0.01

The value of R<sup>2</sup> of control variable is not incorporated in the R<sup>2</sup> value of independent variables.

acceptable range. So, it is evident that there does not exist any multicollinearity within the independent and dependent variables. Hence the results are reliable as well as generalizable.

## Discussion

This study provides empirical evidence of the effect of alternative types of interpersonal trust on the willingness of workers working in the business organizations of Pakistan on the sharing and usage of their tacit knowledge with their coworkers. The findings of this study show that both the alternative types of trust positively affect the proposed relationship. The study also finds out that the affect-based trust is more important in employees' willingness to share their knowledge as compared to cognition-based trust. While cognition-based trust is more important in employees' willingness to use tacit knowledge.

People develop close and intimate personal relationships with other people through frequent and face-to-face interactions. Through this they develop affective trust with each which also promotes social ties. So, people feel comfortable in sharing their tacit knowledge with those people with whom they have close interaction. When employees do not have affect-based trust in their colleagues, they are more reluctant to share their tacit knowledge with them. As Nonaka (1994) also argued that for employees to share their tacit knowledge there needs to be socialization between the employees and affect-based trust promotes this socialization process. The quality of personal relationship among the employees matters. If the personal relationship among two colleagues is better than with other colleagues then they will show higher willingness to share their tacit knowledge.

The results also indicated that both kinds of trust are important in predicting the dependent variable, willingness to share and use tacit knowledge. Only the willingness to share tacit knowledge is not important as the knowledge shared between the colleagues but not used is of no value for the organizations. While on the other hand, if the employees is capable and competent to use tacit knowledge but does not have close relationship with others then he will not be able to acquire it from his colleagues. So, both kind of trust are necessary in predicting dependent variable of the study.

The findings of the study also show that affect-based trust is more likely to influence willingness to share knowledge as compared to cognition-based trust whereas cognition-based trust is more likely to influence the usage of tacit knowledge as compared to affect-based trust. If the employees are not confident of the competencies and professional capabilities of the source, they will be reluctant to use that knowledge. When they trust the source for its professional reputation then they will be more open and ready to use the knowledge. When someone relies on others tacit knowledge and applies it but gets poor results, then they are less likely to use knowledge from that source as they would doubt the professional competence of that source.

#### CONCLUSION

The findings of this study show that both kinds of trust are important for employees in sharing and using their tacit knowledge. In this era of knowledge economy when knowledge is considered the most important resource for gaining sustainable competitive advantage, it is necessary for organizations to leverage this resource. Organizations should build interpersonal trust among their employees so that the tacit knowledge which resides in their employees is utilized. It is also important to note that merely sharing of tacit knowledge is not important as the knowledge which has been shared but not used will be of no use for the organizations. So it is suggested that both, the organization and the employees, should make effort on their part to develop the affective and cognitive trust with their colleagues. This study contributes in the existing literature by providing empirical evidence of the effect of alternative type of trust on the sharing and usage of tacit knowledge among the employees of the business organizations of Pakistan.

## REFERENCES

- Abrams, L. C., Cross, R., Lesser, E., & Levin, D. Z. (2003). Nurturing interpersonal trust in knowledge-sharing networks. *The Academy of Management Executive* (1993-2005), 64-77.
- Andrews, K. M., & Delahaye, B. L. (2000). Influences on knowledge processes in organizational learning: The psychosocial filter. *Journal of Management Studies*, 37(6), 797-810.
- Aukett, R., Ritchie, J., & Mill, K. (1988). Gender differences in friendship patterns. *Sex Roles*, 19(1), 57-66.
- Becerra, M., Lunnan, R., & Huemer, L. (2008). Trustworthiness, risk, and the transfer of tacit and explicit knowledge between alliance partners. *Journal of Management Studies*, 45(4), 691-713.
- Brockmann, E. N., & Anthony, W. P. (1998). The influence of tacit knowledge and collective mind on strategic planning. *Journal of Managerial issues*, 10(2), 204-222.
- Choe, J. (2004). The consideration of cultural differences in the design of information systems. *Information & Management*, 41(5), 669-684.
- Choo, C. W. (1996). The knowing organization: how organizations use information to construct meaning, create knowledge and make decisions. *International Journal of Information Management*, 16(5), 329-340.
- Chowdhury, S. (2005). The role of affect-and cognition-based trust in complex knowledge sharing. *Journal of Managerial issues*, 310-326.
- Desouza, K. C. (2003). Facilitating tacit knowledge exchange. *Communications of the ACM*, 46(6), 85-88.
- Friedman, M. (2007). The social responsibility of business is to increase its profits. *Corporate ethics and corporate governance*, 173-178.
- Grover, V., & Davenport, T. H. (2001). General perspectives on knowledge management: Fostering a research agenda. *Journal of management information systems*, 18(1), 5-22.
- Haldin-Herrgard, T. (2000). Difficulties in diffusion of tacit knowledge in organizations. *Journal of Intellectual capital*, 1(4), 357-365.
- Holste, J. S., & Fields, D. (2010). Trust and tacit knowledge sharing and use. *Journal of knowledge Management*, 14(1), 128-140.
- Hsu, M. H., Ju, T. L., Yen, C. H., & Chang, C. M. (2007). Knowledge sharing behavior in virtual communities: The relationship between trust, self-efficacy, and outcome expectations. *International Journal of Human-Computer Studies*, 65(2), 153-169.
- Hull, C. E., & Lio, B. H. (2006). Innovation in non-profit and for-profit organizations: Visionary, strategic, and financial considerations. *Journal of Change Management*, 6(1), 53-65.
- Kakabadse, N. K., Kouzmin, A., & Kakabadse, A. (2001). From tacit knowledge to knowledge management: leveraging invisible assets. *Knowledge and Process Management*, 8(3), 137-154.

- Levin, D. Z., & Cross, R. (2004). The strength of weak ties you can trust: The mediating role of trust in effective knowledge transfer. *Management science*, 1477-1490.
- Lewis, J. D., & Weigert, A. (1985). Trust as a social reality. *Social forces*, 63(4), 967-985.
- Lin, C. P. (2007). To share or not to share: Modeling tacit knowledge sharing, its mediators and antecedents. *Journal of business ethics*, 70(4), 411-428.
- Locke, E. A. (1999). Some reservations about social capital. *The Academy of Management Review*, 24(1), 8-9.
- Lucas, L. M. (2005). The impact of trust and reputation on the transfer of best practices. *Journal of knowledge Management*, 9(4), 87-101.
- McAllister, D. J. (1995). Affect-and cognition-based trust as foundations for interpersonal cooperation in organizations. *Academy of management journal*, 24-59.
- Nonaka, I. (1994). A dynamic theory of organizational knowledge creation. *Organization science*, 14-37.
- Nonaka, I., & Takeuchi, H. (1991). *The knowledge-creating company*. Harvard business review, 69(6), 96-104.
- Nonaka, I., & Takeuchi, H. (1995). *The knowledge-creating company: How Japanese companies create the dynamics of innovation*: Oxford University Press, USA.
- Nonaka, I., Umemoto, K., & Senoo, D. (1996). From information processing to knowledge creation: a paradigm shift in business management. *Technology in society*, 18(2), 203-218.
- Nunnally, J. (1978). *Psychometric Theory*. New York: McGraw-Hill.
- O'Neill, B. S., & Adya, M. (2007). Knowledge sharing and the psychological contract: Managing knowledge workers across different stages of employment. *Journal of Managerial Psychology*, 22(4), 411-436.
- Politis, J. D. (2003). The connection between trust and knowledge management: what are its implications for team performance. *Journal of Knowledge Management*, 7(5), 55-66.
- Ruggles, R. (1998). The state of the notion. *California management review*, 40(3), 80-89.
- Stenmark, D. (2001). Leveraging tacit organizational knowledge. *Journal of management information systems*, 17(3), 9-24.
- Sutter, M., & Kocher, M. G. (2007). Trust and trustworthiness across different age groups. *Games and Economic Behavior*, 59(2), 364-382.
- Zack, M. H. (1999). Managing codified knowledge. *Sloan management review*, 40(4), 45-58.

