Examining the relationship between Affective Commitment and Knowledge Sharing, and Considering Variables of Affective Trust and Cost of Knowledge Sharing

Ali Shirazi¹*, Neda Shakoori², Marzieh Moshtaghi Yazdi Nezad³, Zahra Asemi⁴
1. Associate Professor, Department of Management, Ferdowsi University of Mashhad, Iran
2, 3. Master of Business Administration, Ferdowsi University of Mashhad, Iran
4. PHD Candidate of Payam Noor University. Tehran. Iran

Abstract
Nowadays, knowledge sharing has become the source for pursuing and maintaining competitive advantage. In order to achieve such advantages, organizations need to identify individuals and organizational factors influencing knowledge sharing. This study mainly aims to investigate the relationship between affective commitment and knowledge sharing, with regard to affective trust and cost of knowledge sharing. For this purpose, 185 questionnaires, each containing 30 questions, was dispensed among employees of Khorasan science and Technology Park. Pearson’s correlation coefficient was applied to test the first and third hypotheses and regression analysis for the second one. The results suggested a direct and positive relationship between affective commitment and knowledge sharing behavior, but the impact of affective trust as the moderator variable and cost of knowledge sharing as the mediator between affective commitment and knowledge sharing was not confirmed. On the other hand, research data supports a direct and negative relationship between the cost of knowledge sharing and knowledge sharing behavior, which is moderated through affective trust.

Keywords: knowledge sharing, affective trust, affective commitment, cost of knowledge sharing

* Corresponding Author, Tel: +98-9151591839  Email: a-shirazi@um.ac.ir
Introduction

Changes appeared in capitalism and the emergence of advanced communication technologies, complex social-cultural changes, increased interest for globalization, intensified competition and other factors has led knowledge to the center of science and philosophy in contemporary knowledge society (Politis, 2003: 57). In a knowledge-based economy, intangible assets are increasingly becoming differentiating competitive factors for organizations, especially in industry and services fields. In fact, intangible assets like trademarks and reputation, employee-related skills, and knowledge and organizational culture are considered as an essential principle for competitive advantage (Riege, 2005: 19). Knowledge helps organizations anticipate environmental changes, and take more effective decisions facing them. Organization's ability to learn, organize and distribute knowledge improves their decision-making quality, makes processes and customer satisfaction more efficient, and reduces control costs. Therefore, organizations are progressively investing in knowledge management (KM) systems (Lin et al, 2012: 13).

In recent decades, an increase interest toward implementing KM projects occurred, especially in knowledge-based organizations in which efficient use of knowledge resources is a critical factor for global competitiveness (Davenport & Prusak, 1998). Also we can see a growing interest in developing systematic approaches to share knowledge in organizations, in order to gain a competitive advantage (Wasko & Faraj, 2000: 156; Wong, 2005: 261; Ajmal et al, 2010: 156). Knowledge-based organizations are those that are based more on their employee’s minds, rather than their physical abilities (Wong, 2005: 261). In these organizations, KM is considered a promising strategy to ameliorate business processes and achieve competitive merits (Chua & Lam, 2005: 6; Donate & Guadamillas, 2011: 890). It also exerts a significant influence on success or failure of business management; thus, overall it is an important issue in knowledge-based organizations (Jung yeh et al, 2006: 794).

One of the stages organizations take to implement KM is sharing the existing knowledge among the staff. Peter Sanje believes that enterprise
knowledge is created through sharing the knowledge learning process among co-workers (Bartol & Srivastava, 2002: 63). Moreover, sharing knowledge in organizations will lead to accelerated individual and organizational learning, innovation and an increase in market performance (Riege, 2005: 18). He believes that one of the challenges that organizations are facing is harnessing the employees’ minds and spirits to share knowledge and to keep knowledge flowing at all levels (Politis, 2003: 57). Knowledge has an adhesive basis, so even if available, it is not easily streamed (Szulanski, 1996: 37). In other words, providing a sense of trust and cooperation is the preliminary background necessary to share knowledge in an organization; since in the culture of trust and collaboration, participants are willing to share their knowledge and are open to trust others’ knowledge (Jung yeh et al, 2006: 800).

In previous studies on knowledge sharing, critical factors to share knowledge are mostly considered; while, effectiveness of trust, commitment and cost of knowledge sharing is not taken into consideration much. Thus, in this paper, we aim to study the role of such factors, particularly knowledge sharing process.

**Knowledge sharing**

From the resource based perspective, knowledge is one of the most essential assets in any company; as its presence (or absence) can lead to higher (or lesser) efficiency. Knowledge is known as one of the most eminent strategic operands, compared to other traditional production factors like properties, manpower, financial assets and etc (Assudani, 2005: 32).

In order to define knowledge, it cab referred to as “something that causes a skillful action”. In other words, knowledge is the essence that underpines skillful actions (Nonaka and von Krogh, 2009: 636). Knowledge and expertise are somehow synonym, as they both refer to information processed in individuals' minds, and are practically utilized in the real world (Raban & Rafaeli, 2007: 2452). Knowledge is a basis to sustain competitive advantage; it is the flow of information which
provides a framework to incorporate new experiences and information (Chen & Huang, 2012).

Knowledge sharing is to involve other employees in information, ideas, suggestions and related organizational expertise. Sharing knowledge is the key element in a KM system. In this regard, four steps are identified in sharing knowledge: (1) sharing and combining knowledge with organizational databases; (2) sharing knowledge through official frameworks among teams and work-groups; (3) Sharing knowledge through non-official channels and (4) Sharing knowledge between committees accordingly formed to a specific interest (Bartol & Srivastava, 2002: 65).

Sharing the knowledge leads to diversity in organizational knowledge. Due to increased competition and technological mutations, production methods cannot always maintain their level of effective; in other words, knowledge is highly prone to be obsolete. Thus, owning manifold knowledge in presenting new products and the business management performance is considered as a competitive advantage (Zhou & Chen, 2011: 823). Basically, organizations make new knowledge by combining the existing ones (Nahapet and Ghoshal 1998) and the pre-step to combining is knowledge sharing. Knowledge shared between individuals might be perspicuous or tacit; and of course the core knowledge is mostly tacit (Swart & Harvey, 2011:709). Perspicuous knowledge can be shared through verbal communication. However, sharing perspicuous knowledge or even tacit knowledge requires individual efforts (Bartol & Srivastava, 2002: 65). Nonaka (2007) describes knowledge flow as "making insights, intuitions and sentiments available to others". Zhou and Chen (2011) expressed knowledge rigidity as having difficult and uneven dependency on a specific type of knowledge, which leads to permanent use of a single knowledge. Thus, the organization will most likely ignore the environmental changes, thus their competitive advantage will be lost in the long run (Zhou & Chen, 2011: 822).

Zolanski (1996) also refers to stickiness characteristic of knowledge, failure to transfer and flow the knowledge, i.e. knowledge sharing. He classified the basis causing this internal stickiness in four categories:
• First: characteristics of the shared knowledge. A person's knowledge might not be fully proved; this feature will most likely lessen the legitimacy of the knowledge. The knowledge might also have practical ambiguity, i.e. it is only visible in tacit skills of a person.

• Second: characteristics of the holder of knowledge. The holder might lack the required motivation to share the knowledge. This lack of motivation can be due to fear of losing ownership of the knowledge, or because of the time and cost that should be borne to share the knowledge. Also, the holder might lack the element of trust.

• Third: characteristics of the receiver. Knowledge transfer does not take place only by sharing from the source; it also requires absorption from the recipients as well. The inability to absorb knowledge can be due to lack of capacity to absorb. Moreover, it can be due to lack of retentive capacity as well as lack of motivation.

• Fourth: The situation in which knowledge transfer takes place. This means structural and organizational features, and arduous relationship (Szulanski, 1996: 30).

Unlike other assets, knowledge extends only if shared. This is mainly because knowledge of the holder is combined with people who are taking it, and it gets evolved and expands (Harvey & Swart, 2011: 709; Wasko & Faraj, 2000: 149).

The Organization should take its staff as sources of knowledge, and try to combine concepts of KM with human resource management systems. For individuals, it is important to get involved in business processes and knowledge sharing procedures (Szulanski, 1996: 31). In Encoded Knowledge Strategy, providing individual rewards is effective; while in personalization strategy since is not possible to assess the role of people, reward systems should be based on group performance. Other organizational factors such as job security, trust, care and organizational behavior can increase the company performance through reducing the cost of sharing and the tendency to keep the knowledge. Therefore, in order to encourage the knowledge sharing behaviors, managers need to
pay special attention to their KM strategies (Lee & Ahn, 2007: 951). Sometimes, due to reasons including loss of superiority, lack of sufficient time and resource, or not getting enough reward, people refuse to share knowledge. Because of these reasons, despite benefits allocated for sharing the knowledge, it actually happens much less than expected. So to encourage knowledge sharing between employees, benefits should rise (Bartol & Srivastava, 2002: 65). In other words, incentive pay plans play an important part in creating motivation to share knowledge (Schultze & Leidner, 2002). Ray States that existence of a reward system is essential to encourage knowledge sharing behaviors. This reward system should clearly express the expectations from individuals and the benefits of knowledge sharing, and of course, people also should have trust in and commitment toward the system. Otherwise, people would share only a little (Ray, 2008: 162).

What makes knowledge distribution more difficult is identifying social interactions in which knowledge exists; in the sense that a major part of knowledge lays within the daily life experiences. This knowledge is volatile, and hard to get embodied in form of words. For example, only a small part of an emotional experience can be expressed in words (Lang, 2004, citing Badaracco, 1998).

According to Wasco and Faraj, there are three approaches in designing KM systems. The first approach sees knowledge as an object. By this definition, knowledge exists independently from human intervention, and is a private good. The second approach is that knowledge exists independently from human action, but is not easily separated from its owner. In the sense of this view, knowledge is also a private good. But there is a third approach which believes that knowledge is embedded in society. In this perspective, knowledge is a public good which is created, shared and stored publicly. They believe that when people accept knowledge as a public good, they have a high motivation to share it, and this motivation arises from a sense of moral obligation, rather than profit-seeking or personal gain. If knowledge is considered a private good and is deemed to be in possession of a holder -like the first and second perspectives, sharing occurs only if a benefit is in return. In these cases, people are motivated to share knowledge.
through self-interest and profit. And in return they expect tangible profits, such as promotions and tip; or intangible profits like reputation. But in the third approach, the person does not consider personal profits, and in fact divulges a pro-social behavior – which is welfare and helping others without expecting compensation (Wasko & Faraj, 2000: 157).

Unlike this point of view, Raban and Rafaeli divided knowledge into two types of public and personal. They believe that in comparison with public and organizational knowledge, knowledge with individual and private property is more likely to be shared; because in this case those people are the only source to the knowledge, and are more committed to share it. In these circumstances, sharing brings business reputation and appreciation. Also according to their findings, pro-social point of view and a sense of private ownership brings increased knowledge sharing behavior, and personal interests brings reduced knowledge sharing behavior (Raban & Rafaeli, 2007: 2370). Jaronpa and staples (2000) also report the same vision, revealing that information with corporate ownership is shared less than private information.

**Affective trust**

People are the main cores of the organizational knowledge. Enterprise people are those who create and share knowledge. Thus, managing those who create and share the knowledge and studying the relationships among them sounds critical. The significance of interpersonal trust, in maintaining team and organizational effectiveness is progressing. Trust is one of the competitive advantages of the organization; since it cannot easily imitated. No organization can perform without interpersonal trust, and no leader can ignore the factor of trust in the organization (Gillespie & Mann, 2004: 588). Hence in the last few decades, the concept of trust in relationships within the enterprise and among them is increasingly getting attention (Bijlsma & Koopman, 2003: 554).

Trust is defined as having confidence in others’ words and doings. In other words, trust is the extent a person trusts someone else, and operates according to his words and decisions. The extent of trust in an
Organization depends on the management philosophy, operations, organizational structure and employees' expectations from mutual relations (Ferres et al, 2004: 609).

Trust has a complex and multi-facet structure with affective, cognitive and behavioral roots. Cognitive trust refers to the beliefs of the others; while affective trust refers to essential role of affections in the process of trust. Behavioral trust occurs in two forms: leaning on someone else, and sharing sensitive information with another. Studies suggest that common values play an important role in creating higher levels of trust in an organization. Having higher levels of trust in colleagues depends on recognizing their values. In other words, common values make the creation of the mutual trust possible (Gillespie & Mann, 2004: 589).

Some scholars define trust within two facets: cognitive and affective. Cognitive trust is when the manager has appropriate skills to give confidence to employees which need to function, and affective trust is when the manager does not intentionally do something that harms its own employees (Kelloway & Barling, 2000: 296; McAllister, 1995: 45).

Studies demonstrate a strong linkage between trust and affective commitment. Also trust is considered a key factor in developing affective commitment to the organization. Individuals, in normal circumstances, are not willing to share knowledge (Wasko & Faraj, 2000: 171). When there is a mutual trust among employees, they are less intended to keep the knowledge to themselves (Hansen, 1999; & Takeuchi Nonaka, 1995). The desire to participate in knowledge sharing depends strongly on the trust level in organization (Barachini, 2009: 99). Trust, increases the developing of social assets (Ferres et al, 2004: 608), through that, knowledge sharing activities can be strengthened (Mariotti, 2011: 877).

In another study, Bijlsma & Koopman, (2003: 545) note that having attitude towards change is a result of trust, and that trust builds organizational behavior and confidence. By having more trust in each other, employees speed-up knowledge sharing in their organization
(27). Also, trust helps divulging pro-figure behaviors, as well as cooperation and acceptance of superior’s decisions.

Creating trust-based relationships between individuals and groups facilitate the knowledge sharing process (Wong, 2005: 269). Trust can be used as a substitution for control mechanisms. Trust can reduce transactional costs (Bijlsma & Koopman, 2003: 550).

Trust is the fundamental key in the process of knowledge sharing. Holst and Fields suggests that when team size is small and there are small number of units, since relations are more friendly, trusting relationships between individuals are better which will facilitate knowledge sharing. Trust-based relationships can improve pro-figure behaviors and voluntary co-operations in the organization (Bijlsma & Koopman, 2003: 543) and since knowledge sharing is in pro-figure behaviors and organizational citizenship field, it can be hypothesized that trust affects knowledge sharing behaviors. The more Organizational Citizenship Behaviors (OCB) are strengthened, the more possibility that strengthening knowledge sharing behaviors occurs (Goodman & Darr, 1998).

Discussions about trust, by growing interest in using more flexible structures as well as less controlling leadership styles are gaining more attention. In fact, the nature of work has differed in such a way that administrators cannot have proper and sufficient control over all functions of the organization anymore; and task forces rely on their mind abilities rather than physical strength (Bijlsma & Koopman, 2003: 545).

Jung Ye et al. (2006) named effective factors to KM as culture, people, information technology, strategy and leadership. They acknowledged that an appropriate culture based on trust not only facilitates the sharing of knowledge, but improves discussion and mutual offerings among individuals. It also leads to an increase in the extent of transferred knowledge and ameliorates the quality of knowledge. Furthermore, they suggest that administrators should preserve trust on an acceptable level in the organization (Jung yeh et al, 2006: 802).
Lee and Choi (2003) present trust as an important factor in creating a culture of knowledge sharing; however, creating trust requires a great amount of time and effort (Harvey & Swart, 2011: 710). Zhou et al (2010) state that existence of social ties can affect knowledge sharing processes within teams or among them. They believe that affective trust and cognitive trust are essential for effective flow of knowledge.

Sanchez states that higher levels of trust can result in a face-to-face communication that will eventually lead to a better transfer of knowledge (Montro Sanchez et al, 2011: 949). Wong also describes culture as an important factor in success of KM; and admits that some components of a culture, including trust and cooperation are crucial in transferring and sharing knowledge. Without mutual trust, corporate individuals are skeptical about others’ intentions and behaviors, and spare them from their knowledge (Wong, 2005: 269). Regarding the importance of the role of culture, Haschild et al (2001) believe that the extent of success or failure of a KM project can be determined via the success rate of establishing a knowledge sharing culture.

Ajmal et al identified the critical success factors of a KM project, which include existence of a culture based on mutual trust among members, as well as the existence of a motivational system for sharing knowledge. They believe that due to the lack of trust or having a knowledge hoarding state of mind, employees refuse to share their knowledge. Therefore, social and cultural characteristics, and key factors necessary to knowledge sharing should be reviewed and analyzed (Ajmal et al, 2010: 165). Succession of knowledge sharing largely depends on effects of social and psychological systems (Raban & Rafaeli, 2007: 2295; Wasko & Faraj, 2000: 156; Jung Yeh et al, 2006: 795).

**Affective commitment**

Another factor of influence on knowledge sharing is the employees’ commitment to organization. Staffs’ interest to use their knowledge in the interest of the organization is greatly rooted in commitment and trust. (Barling & Kelloway, 2000: 296).
As level of commitment toward the company increases for an employee, the desire to leave the organization gets lessened. With regard to importance of this issue, every organization must assemble organizational commitment in their human resources strategies. Commitment is divided into two categories: cognitive and behavioral. Cognitive commitment (or affective commitment) is the extent of a person's loyalty to the organization. This form of commitment is based on identity and individual partnership in the organization. In contrast, behavioral commitment refers to a process in which individuals connect themselves to the organization and emphasize on individual acts. Having relationships and doing activities in an organization has prices for anyone - such as time, effort, etc. Cognitive commitment can be divided into three categories: affective, normative and continuous. Allen and Meyer (2000) define affective commitment as individuals’ sense of belonging, personal identity and participation in the organization. Normative commitment is based on expenses that a person has to pay, in case of leaving the organization. Continuous commitment is individuals’ emotions towards staying in the organization (Iverson & Buttigieg, 1999: 308).

In other words, individuals with strong affective commitment stay in the organization, because they want to. Individuals with a high cognitive commitment stay in the organization, because they feel like they have to; but individuals with a strong continuous commitment feel the need toward the organization, so they won’t leave (Iverson & Buttigieg, 1999: 51). In case of affective commitment, the reason to stay with the organization arises from the heart and the sense of honor that being a member of that organization brings about (Kelloway & Barling, 2000: 295). Continuous commitment arises from an external factor; such as the fear of not finding the perfect job outside the organization. Finally, normative commitment is rooted in values or ethics.

Different forms of commitment are not delivering same results. In one study, affective and cognitive commitment had positive results in the Organization (such as leaving less, less absenteeism and accepting changes easier due to affective commitment) (Iverson & Buttigieg, 1999: 308). In another study, affective commitment was more effective
on organizational variables such as job satisfaction and perceived organizational support than the other two. Also, affective commitment has a positive impact on organizational participation, job performance and organizational citizenship behavior; and employees with higher affective commitment are participating more in meeting organizational goals (Ferres et al, 2004: 612).

**Cost of knowledge sharing**

Some consider knowledge sharing as a human attribute, or in other words they see it as a human feature. They believe that knowledge sharing is done spontaneously through formal or informal channels. Raban and Rafaeli believes that even though people have the tendency to share, but sharing knowledge may require much effort from the perspective of using the embedded technology or time spent (Raban & Rafaeli, 2007: 2411).

In contrast, there is another point of view in which no one offers owning knowledge in for free. Sharing knowledge is known as a business trading process (Barachini, 2009: 98). According to social exchange theory, each individual adjusts its relationships with others based on personal cost-benefit analysis. These benefits do not need to be tangible; the person might get involved in interactions under the corresponding expectations in the future, expectations which are adjusted based on trust. Lee and Aan examined the influence of bonus systems on the process of knowledge sharing. They believe there are inherent obstacles in knowledge sharing that impose cost and decrease participation in knowledge sharing. They identified two types of obstacles in their model. The first obstacle is caused by employees viewing their knowledge as a power tool. In these cases, through sharing their knowledge, individuals feel this power reduced, and have a feeling that sharing is threatening their position in the organization. So, they attempt to keep their knowledge to themselves and blockade it from external access. The second obstacle arises from the extent of time and effort that the holder of the knowledge should endure to transform its knowledge from implicit to explicit (Lee & Ahn, 2007: 945).
According to "social dilemma" theory, behaviors based on individual rationality lead to circumstances in which all face worst case scenario. In other words, individual rationality leads to irrational collective behaviors. Studying the social dilemma is examining conflict and tension between collective and individual rationality. Choosing individual benefit in short term is in favor of that person, but if everyone chooses individual benefit, the result will bring disadvantage for everyone in the long run. In order to resolve this issue, Kollack (1998) provides motivational, strategic and structural solutions and argues that people compare benefits of knowledge sharing and acting in favor of everyone with costs of acting against individual rationality, and behave accordingly (Kollack, 1998: 206).

Also, some studies in knowledge sharing literature, using the concepts of social exchange theory, attempt to define knowledge sharing behavior. This theory describes knowledge sharing behavior based on personal benefits and reciprocity. Personal benefit acts as the main stimulus in knowledge hoarding behavior and knowledge confinement (Raban & Rafaeli, 2007: 2370).

Davenport and Prvsak (1998) outlined knowledge sharing from the perspective of expected benefits that may regulate behavior. These benefits include: future mutual relationships, situations, job security, or the tendency to upgrade. Through this perspective, if someone trusts that there is a specific behavior along with benefits in the future, knowledge sharing is directly affected. This theory names a number of factors which facilitate and encourage the sharing of knowledge among employees, including social patterns and relationships and repeating these interactions with other employees, the language of sharing, trust, sharing norms, perceived costs, perceived rewards and etc. One of the most effective methods in reducing perceived costs of knowledge sharing is having technological tools with proper design and ease of access, in order to facilitate relevant tasks and cut the extent of time required to share ideas with others (Cabrera & Cabrera, 2005: 723).

Following, three hypotheses are proposed:
Hypothesis 1: There is a direct and positive relationship between affective commitment and knowledge sharing behavior, which is moderated via affective trust.

Hypothesis 2: There is an indirect and positive relationship between affective commitment and knowledge sharing behavior which is mediated via cost of knowledge sharing.

Hypothesis 3: There is a direct and negative relationship between cost of knowledge sharing and knowledge sharing, which is moderated via affective trust.

According to proposed hypotheses, research model is to be described as Figure 1.

Methodology

This study is a descriptive-survey study. To test the study hypotheses, questionnaire developed by (Casimir et al., 2012) was used to collect data. The items were scored in a 5-point Likert-type scale (ranging from 1= completely disagree to 5= completely agree). Given that, the Persian version of the questionnaire was used, the content validity of the questionnaire was evaluated and confirmed by several professors in management.
This study was conducted in subset companies of Mashhad science and Technology Park. This choice grounds in the fact that this organization has a knowledge-based structure. Knowledge sharing is taking place in most departments of this organization. Mashhad Science and Technology Park comprises of more than 90 large and small knowledge-based companies, that through supporting entrepreneurs, is considered a suitable incentive.

Overall, about 354 employees are currently working in Mashhad Science and Technology Park. Using the Cochrane's sampling analysis, 184 samples were determined necessary, however, after all, 200 questionnaires were distributed among members, from which 185 were collected. To study the reliability of the questionnaire, 30 questionnaires were collected initially and Cronbach's alpha value was calculated. The result equaled to 0.913, so reliability verification was achieved.

**Research Findings**

According to demographic statistics, 74 of the respondents were female while 111 were male. Respondents were mostly in the range of 31 to 40 years and most of them had university undergraduate degree. 100 of respondents were employee, 69 respondents were managers and 16 were senior directors. The average tenure was about 6 years, which implies that organizations in the research sample are roughly young. In inferential statistics, in order to examine the 3 hypotheses, Pearson’s correlation coefficient and linear regression were used.

**Hypotheses test**

**Hypothesis 1:** There is a direct and positive relationship between affective commitment and knowledge sharing behavior, which is moderated via affective trust.

Pearson's correlation coefficient is used to evaluate the first hypothesis. The test results are shown in table 1. According to table 1, the value of Pearson correlation coefficient between emotional commitment and knowledge sharing behavior, regardless of the
emotional trust variable is 0.343 (which is positive) and significance level for correlation coefficient is 0.000 (which is less than 0.05). Thus, with 95 percent certainty, there is a direct and positive relationship between affective commitment and knowledge sharing behavior. On the other hand, taking affective trust variable into consideration, the value of Pearson correlation coefficient between affective commitment and knowledge sharing behavior reduces to 0.137, and significance level for the correlation coefficient changes to 0.063 (which is more than 0.05). Therefore there is no significant relationship between affective commitment and knowledge sharing behavior—with regard to affective trust variable. So the first hypothesis is not confirmed.

Table 1. Partial correlation between affective commitment and knowledge sharing behavior.

<table>
<thead>
<tr>
<th>Hypothesis 1</th>
<th>Affective Commitment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regardless of Affective trust</td>
<td>Correlation coefficient 0.343</td>
</tr>
<tr>
<td>significance level</td>
<td>0.000</td>
</tr>
<tr>
<td>With regard to affective trust</td>
<td>Correlation coefficient 0.137</td>
</tr>
<tr>
<td>significance level</td>
<td>0.063</td>
</tr>
</tbody>
</table>

Hypothesis 2: There is an indirect and positive relationship between “affective commitment” and “knowledge sharing behavior” through the mediating variable of “cost of knowledge sharing”.
To investigate this hypothesis, regression analysis is applied. In order to test the effects of mediating variables, a set of regression models should be estimated and in each equation, the regression coefficients are estimated and examined. To establish a mediating effect, the following conditions must be met:

**Condition 1** – The Regression coefficient must be significant in equation 1 (the correlation between independent and mediator should be significant). Test results for examining condition "1" are shown in Table 2.

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>B Coefficients</th>
<th>Test statistics (t)</th>
<th>Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Un-standard coefficient</td>
<td>Standard coefficient</td>
<td></td>
</tr>
<tr>
<td>Static coefficient</td>
<td>14.304</td>
<td>------</td>
<td>4.975</td>
</tr>
<tr>
<td>Affective commitment</td>
<td>0.9</td>
<td>0.457</td>
<td>6.942</td>
</tr>
</tbody>
</table>

*Significance at significance level of 0.05

According to table 2, regression coefficient for affective commitment is 0.9. Moreover, the Significance level for affective commitment is 0.000 (which is less than 0.05). So, with 95 percent certainty, there is a significant relationship between affective commitment as an independent variable and cost of knowledge sharing. In other words, regression coefficient is significant in this equation, and correlation between independent variable and mediator is significant. Regression model is as follows:

\[(\text{Affective Commitment})(0.9) + 14.304 = \text{cost of knowledge sharing}\]

Therefore, condition “1” is met.

Before examining condition "2", the regression test on dependent variable (knowledge sharing behavior) on independent variable (affective commitment) was conducted. Results are shown in table 3.
Table 3 - Dependent variable regression coefficients (knowledge sharing behavior) on the independent variable (affective commitment).

<table>
<thead>
<tr>
<th>Coefficient</th>
<th>B Coefficients</th>
<th>Test statistics (t)</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Un-standard coefficient</td>
<td>Standard coefficient</td>
<td></td>
</tr>
<tr>
<td>Static coefficient</td>
<td>11.362</td>
<td>-----</td>
<td>12.768</td>
</tr>
<tr>
<td>Affective commitment</td>
<td>0.198</td>
<td>0.343</td>
<td>4.934</td>
</tr>
</tbody>
</table>

*Significance level is 0.05

According to Table 3, significance level for affective commitment is 0.000 (which is less than 0.05). Thus, it can be noted that with 95% certainty, a significant relationship between affective commitment (as the independent variable) and knowledge sharing behavior (as the dependent variable) is supported by research data. Since the regression coefficient for the affective commitment is 0.198 (and positive), there is a positive and direct relationship between affective commitment and knowledge sharing behavior (without a mediating variable). Cost of knowledge sharing according to regression model is as follows:

\[
(\text{Affective commitment}) \times (0.198) + 11.362 = \text{knowledge sharing behavior}.
\]

Condition 2- Regression coefficient of the intermediate variable in the third equation should be significant.

Test results for condition "2" are shown in Table 4.

Table 4. Variables regression coefficients

<table>
<thead>
<tr>
<th>Coefficient</th>
<th>B Coefficients</th>
<th>Test statistics (t)</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Un-standard coefficient</td>
<td>Standard coefficient</td>
<td></td>
</tr>
<tr>
<td>Static coefficient</td>
<td>9.187</td>
<td>-----</td>
<td>11.094</td>
</tr>
<tr>
<td>Affective commitment</td>
<td>0.061</td>
<td>0.106</td>
<td>1.553</td>
</tr>
<tr>
<td>Cost of knowledge sharing</td>
<td>0.152</td>
<td>0.519</td>
<td>7.607</td>
</tr>
</tbody>
</table>

*Significance level is 0.05
According to Table 4, regression coefficient of the mediator variable (incoming cost of sharing knowledge) is 0.152. Significance level for incoming cost of sharing knowledge as the mediator variable is 0.000 (which is less than 0.05). Thus, it can be noted that with 95% certainty, regression coefficient for the mediating variable is significant. Therefore, condition “2” also holds true. In other words, the mediating variable obtained from the test can be effective. Moreover, considering Table 4, we can observe that significance level for affective commitment variable is 0.122 (which is more than 0.05). Thus, this variable is not significant in the model and thus, must be eliminated from the regression model. In other words, cost of knowledge sharing does not play a mediating role in the relationship between affective commitment and knowledge sharing. Regression model is as follows:

\[
\text{(Cost of knowledge sharing)(0.152)+9.187 = knowledge sharing behavior)}
\]

According to the results, the second hypothesis is not confirmed. Hypothesis 3: There is a direct and negative relationship between "cost of knowledge sharing" variable and “knowledge sharing”, which is moderated via “affective trust”.

**Table 5. Correlation distinction between affective commitment and knowledge sharing**

<table>
<thead>
<tr>
<th>Hypothesis 1</th>
<th>Cost of knowledge sharing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regardless of Affective trust variable</td>
<td></td>
</tr>
<tr>
<td>Correlation coefficient</td>
<td>-0.407</td>
</tr>
<tr>
<td>significance level</td>
<td>0.000</td>
</tr>
<tr>
<td>With regard to variable affective trust</td>
<td></td>
</tr>
<tr>
<td>Correlation coefficient</td>
<td>0.239</td>
</tr>
<tr>
<td>significance level</td>
<td>0.001</td>
</tr>
</tbody>
</table>
Examining this hypothesis is almost the same as for hypothesis 1. The test results are shown in table 5. According to table 5, Pearson correlation coefficient between cost of knowledge sharing and knowledge sharing (regardless of the affective trust variable) is -0.407. Also, significance level for this correlation coefficient is 0.000 (which is less than 0.05). Thus, it can be said with 95% certainty that there is a negative and direct relationship between cost of knowledge sharing and knowledge sharing. On the other hand, taking into consideration the affective trust variable, Pearson correlation coefficient between cost of knowledge sharing and knowledge sharing is reduced (0.239), but the significance level for this correlation coefficient is 0.001, (which is less than 0.05), and it suggests that there is still a significant relationship. So there is a direct and negative relationship between "cost of knowledge sharing" and "knowledge sharing" which is moderated by "affective trust". Therefore, this hypothesis is also supported by research data.

**Conclusion**

In modern economy, knowledge is a strategic factor in achieving a sustainable competitive advantage. However, having knowledge assets is not merely empowering and value making; sharing it with other members of the organization and people outside the organization provides the tendency to create fresh knowledge assets. Hence, in order to achieve the benefits of knowledge, organizations must make attempts to establish and institutionalize knowledge management. Knowledge sharing, as one of the most essential steps in implementing KM, is of great importance. In other words, knowledge sharing functions as a remarkable part in KM. This role is much important that a few scholars believe that KM is synonymous with encouraging people to share their knowledge. Therefore, organizational and individual factors influencing knowledge sharing in organizations are a must be analyzed. Factors influencing knowledge sharing include affective trust and affective commitment as well as cost of knowledge sharing for an individual. Based on the results revealed earlier, affective commitment is influential on knowledge sharing. In other words, the higher the level of affective commitment, the more the desire to share knowledge. Studies demonstrate that employees with higher level of organizational commitment are less likely to leave the organization, are more
motivated, put more effort on tasks and finally are more willing to share their knowledge with their colleagues (Hislop, 2003: 185).

When people feel a sense of belonging toward organization and consider themselves a part of the organization, undoubtedly, they consider organization’s success as their own. In this regard, as they have kept their individual identities along, they will work harder to improve the organization’s outcomes. Since achieving the organizational goals is mostly dependent on knowledge sharing among all members, a person with high affective commitment furthers his efforts to increase knowledge sharing behavior. Similarly (Robertson & Hammersley, 2000: 226) report existence of a positive attitude to knowledge sharing among employees and high levels of commitment in surveyed organization. They also express that high levels of commitment is dependent on staff’s positive attitude toward knowledge sharing.

Other findings of this study indicate that cost of knowledge sharing has significant effect on knowledge sharing behavior. In other words, the more the person percepts individual costs, the less his desire to share his knowledge. Reagans and Mcevily (2003: 260) describe that merging and combining diverse organizational knowledge requires time, effort and a desire to share. This means that knowledge sharing is deemed a costly interaction, which normally does not occur among people (Reagans & Mcevily, 2003: 260).

One of the main costs of knowledge sharing is time. People should prioritize their knowledge, and then pass it to others and both of these actions require time. As a result, a comparison between knowledge sharing and other actions that can be of use takes place. Obviously in such cases, due to timely costs that knowledge sharing behavior incurred, such actions would most likely to be knowledge sharing waiver. In other words, the role of trust in knowledge sharing behavior is remarkable; as trust affects this relationship, and negative effects of knowledge sharing costs become paler. In fact, when people see reliable behaviors such as respecting obligations and refraining to act on given opportunities, they are more likely to share knowledge, despite incurring costs.
This trust should not occur only from the side of holder of knowledge, but also from the recipient. On receiver's side, the element of trust means to have trust in righteousness of knowledge and goodwill from the publisher. So in order to have an effective knowledge sharing, a high level of trust and optimism in relationships among staff is required. Therefore, trust is the most important factor that can create constituent and synergistic interactions among members. Relationships based on trust increase transparency, organizational development, and promote the spirit of teamwork by creating more solidarity and communication among group members. Also, it is worth noticing that the trust between organization and its subsets exerts a direct effect on flow of communication, and affects the extent of knowledge shared amongst employees and departments.

Trust is the channel in which knowledge flows through. In the absence of trust, this channel is blocked. Thus, managers must pay close attention to relationships and interpersonal factors such as trust and commitment, and in addition, to providing structural and technology contexts to accelerate communication and knowledge sharing. However, even though providing structural and technological contexts can facilitate knowledge sharing, it’s not enough. Therefore, the role of interpersonal and human factors such as trust and commitment is much bolder. Technological and structural factors are mainly easing knowledge sharing; however, they are powerless in luring minds and extracting knowledge. In such cases, interpersonal factors like trust and commitment encourage the holder of the knowledge to extract knowledge from his mind. Administrators should create such atmosphere in the organization that makes staff assured about maintaining possession of their intellectual property. One of the guidelines for this purpose is to amend the reward system. In a more affective reward system, while people are set to work in groups, evaluating the group performance and individual performance are done independently. In this system, each person is completely assured that in addition to being beneficial for improving the group performance, his efforts in knowledge sharing are not neglected by managers and conditions for individual development is provided.
Reference


