DEVELOPING A CONCEPTUAL FRAMEWORK FOR KNOWLEDGE SHARING BEHAVIOR BY CONSIDERING EMOTIONAL, SOCIAL AND COGNITIVE INTELLIGENCE COMPETENCIES

Mehdi Abzari¹, Arash Shahin², Ali Abasaltian³
¹Full professor at the University
²Associate Professor, Management Department, University of Isfahan, Isfahan, Iran
³Ph.D. Candidate in Human Resource Management, Research Institute of ShakhesPajouh, Isfahan, Iran

Abstract
Present age is called knowledge economy age. Hence, many organizations think about using tools like knowledge management for their survival. Human activities such as knowledge sharing among organizational members are the basis of knowledge management process in organizations. In many scientific articles, the impact of human traits such as intelligent on knowledge is discussed. Present study is a descriptive survey – type. It aims at studying the impact of employees’ intelligent components on knowledge sharing behavior. Data collection method is a three – part questionnaire and the sample size includes 105 employees of an organizations. Content validity was supported by elites and the reliability of the questionnaire was proved by Chronbach’s alpha ratio. All data were analyzed by correlation test and multivariate regression. Likewise, intelligent components were studied by Boyatzis’ model. Research findings indicate that social intelligence and emotional intelligence impact on knowledge sharing behavior positively and significantly. Also, the relationship between the aspects of emotional intelligence (self – management, self – awareness) and the aspects of social intelligence (social awareness and relations management) with knowledge sharing behavior was supported.

Keywords: knowledge management, knowledge sharing behavior, intelligent components, psychological attributes

1. Introduction
In current conditions in which one can see extreme competition, all organizations are looking for more chance of survival through knowledge management. The most important element of this process is knowledge sharing which is depended on human force’s capabilities and motivation for knowledge sharing rather than IT and hardware equipment (Moradi et al, 2013).
One can define knowledge management as a method to improve performance, productivity, competitiveness, business efficiency improvement, sharing and using intra-organizational information, a tool to improve decision making, a way to acquire the best methods, a way to mitigate the costs and finally a myopia to make the organization more innovative (Danayifard et al, 2011).
Connelly and Kelevy (2003) identified some factors which impact on employees’ understanding on knowledge sharing culture. These factors can be categorized into two organizational and individual factors. Organizational factors include the imagination of people on management supports to share knowledge, on social interaction culture, on organizational size and using technology to facilitate knowledge sharing and dissemination. Individual factors include age, sex and organizational incumbency right. Knowledge dissemination is defined as knowledge sharing management in organization to encourage innovation, awareness on good past trends and stimulating users to adopt better procedures in future decision making processes. The degree of employees’ participation in knowledge sharing process impacts on the quality of new products (Yang, 2008).

The role of knowledge sharing in knowledge management is too important that some connoisseurs state that knowledge management existence is to support knowledge sharing (Davenport, 1998). Another important reason for knowledge sharing is that it mitigates costs, improves performance, mitigates delays in goods delivery, improves service providing and, ultimately, decreases the costs on finding and access to knowledge valuable types inside the organization. Another research shows that knowledge sharing plays a vital role in organization’s general performance improvement (Keshavarzi, 2007). Other studies suggest that employees’ knowledge value is increasing when it is shared with other people. More effective companies in knowledge sharing and transfer have shown higher levels of productivity (Ballen et al, 2005).

Likewise, effective knowledge sharing among organizational members leads to cost mitigation in knowledge production and to guarantee the dissemination of the best working methods inside the organization which enables them to resolve their problems. Concerning effective knowledge sharing among organizational members, Ridge (2005) has defined it as a complicated but value generating activity as the basis of knowledge management process in organizations. Keshavarzi (2008) notes that profit knowledge sharing should be done more objective in organization which accelerates individual, organizational and innovative learning and is better manifested in product and service development which facilitates more success in target market and achieving organization’s macro goals. Knowledge sharing among organizational members would mitigate knowledge generation costs and guarantees the dissemination of the best working practices in organizations.

Hence, present paper plans to provide empirical evidences on the relationship between intelligent components and knowledge sharing and take a trivial step in enriching relevant literature.

2. Literature review

Knowledge sharing behavior

Knowledge sharing is a mutual process of knowledge and knowledge generation (Van den Hooff & Ridder, 2004). Knowledge sharing helps the synergy of people who work toward common aims (Bolan & Tenkasi, 1995). This process is necessary to change individual knowledge to organizational knowledge since knowledge is only in the minds of people (Van Beveren, 2002). Knowledge sharing is a kind of communication process by which two or more parties are involved in knowledge transfer and its output is new knowledge generation (Usoro et al, 2007). Knowledge complicated concept has multiple meanings and categorizations. Discussing on knowledge needs to respect all its aspect and content (Davenport and Prusak, 1997). Knowledge is valid and confirmed information used by organizational leaders in their decision making and activities to achieve success and competitive advantage and includes skills, ideas, roles, principles and trends which help decision making. Knowledge is to achieve information which
can be utilized by employees for organizational progresses (Alvai & Leidner, 2001). If knowledge is shared and transferred in right time among right people and it is used in right time, it would increase organization’s chance to improve the performance (O’Dell & Grayson, 1998). Knowledge and information are used interchangeably. For instance, Cogat and Zander (1992) have defined information as knowledge which can be transferred without losing its cohesion. Nonako (2994) asserts that information and knowledge are similar in many cases although they have differences in other aspects. Information is realer while knowledge is on beliefs and commitments. Ocaner says that compared to knowledge and information, data is the easiest term for description (Gultekin, 2009).

People do not share their knowledge due to different reasons such as knowledge sharing hardness and time-consumption and public servants believe that knowledge sharing is an additional job and they may resist against knowledge sharing knowledge (Sukaran, 2008). One main barrier in establishing knowledge management is people’s tendency to keep their personal knowledge. In fact, it seems that keeping knowledge is seen among people further and sharing knowledge is abnormal especially when there are conditions on personal cost and benefit or power (Wah, 2000). Employees like to keep their knowledge ownership so that they can acquire credit among their colleagues (Murray, 2002, Rowely, 2002). Excessive formalization of the organization would increase distrust among people especially subordinates and superiors and, as a result, such distrust would mitigate sharing knowledge (Spender, 1996). Many employees do not share their knowledge since they fear of reducing their job security (Michailov & Husted, 2003).

Knowledge sharing involves a main part of creating competitive study based on knowledge management. Knowledge sharing can be studied in organizational, collective and individual levels. Organizational and collective knowledge sharing roots in the behavior of people and conducts their behavior (here, it means motivation for knowledge sharing). Broadly, arguments are provided which show the relationship between organizational variables such as human resources, organizational outputs and organizational level knowledge sharing and one should also refer to individual level mechanisms which include motivation, understanding, behavior and interaction among those people (Argore & Ingram, 2000).

Incentives play a critical role in knowledge sharing process. The structure of incentives for knowledge sharing should differed based on knowledge sharing technique. If sharing includes experience documentation of one person on the paper or databases, then coding activities should be conducted based on performance assessments. In contrary, in the case that knowledge sharing is conducted by dialogues among colleagues (personification approach), then employees should be awarded directly (Bareto, 2003). Trust is seen as the most radical indicator of knowledge sharing (Castle Franchi, 2004). One can expect that knowledge owners would not share their knowledge until they receive potential advantages. A financial incentive system is not alone sufficient to encourage employees to exchange their knowledge since the main determinant in social interactions is trust (Dasco and Fereje, 2005).

Knowledge sharing among employees and inside teams would give an opportunity to organization to utilize knowledge – based resources and to convert it into capital (Cabreria and Cabreria, 2002). Studies indicate that knowledge sharing mitigates production costs, improves organizational performance of teams and organization, improves services to customers, completes new product projects rapidly, mitigates delays in goods delivery to customers, increases the innovation capacity of economic unit and finally mitigates costs on access to types of knowledge in organization (Dyer and Nobika, 2002). Knowledge sharing as people’s contribution in collective investment is an important issue which aids the organization to expand
their best ways of learning and to mitigate their tests and errors (Namijai et al, 2007). Conducted studies indicate that the existence of employees who tend to share knowledge and experiences causes that this process is started and expanded automatically (Hold, 2007). Respecting human aspects along with technology is the critical success key in knowledge management activities. Creating an environment based on trust, team working, training and learning, research and development and knowledge sharing and innovation are the most issues which should be respected (Entehayi, 2008).

**Intelligence competencies**

In this research, three components including emotional intelligence, cognitive intelligence competencies and social intelligence competencies are used. According to a definition by Bar-On, emotional intelligence is a set of knowledge and social/emotional capabilities which impact our capability to respond environmental needs effectively (Bar-On, 1997). Social intelligence is the capability to conceive other people and establishing proper relations with them. To this end, an intelligent person is someone who can conceive other people and can establish relations to them (Khosrow Javid, 2002).

Hunt (1927) defines social intelligence as the capability to adapt with other people. Albrecht (2005) defined social intelligence as the conception of social themes and treat others. Gilford (1967, 1981, 1982, 1985) believed that social capital is a set of capabilities or different actions to process the information. Cognitive intelligence is the capability to remind information, to learn new things, to utilize the knowledge, to think rationally and problem solution. Cognitive intelligence allows people to know how other people process abstract information. Cognitive intelligence or IQ addresses to capabilities such as reading, writing, analyzing and rationality and such capabilities need no social skills (Bradberry, 2005). In other word, intelligence is the capability of a person, group and organization to achieve a desired target (Agha Hosseini, 2010). Some authors believe that emotional intelligence and social intelligence are similar theoretically (Davis et al, 1998; Kang et al, 2005; Maier, 2000; Salovy and Maier, 1990; Weiss and Su, 2005; Weiss et al, 2006). In conducted empirical studies, one can find only three studies in which the relationship between social intelligence and emotional intelligence is studied by emphasizing on performance tests (Berchard, 2003; Davis et al; 1998; Weiss and Su, 2007). In their study, Davis et al (1998) concluded that there is a positive correlation between social intelligence and emotional intelligence. Bachard (2003) defined social intelligence as a subset of emotional intelligence although they found that there is no mutual correlation between them.

Social intelligence competency shows the ability of attract cooperation and to establish successful interaction with other people (Boiatzis et al, 2009). Social intelligence competency is defined as the capability of recognition and conceiving others emotions (Boiatz and Raty, 2009) while cognitive intelligence competency is defined as the capability of analyzing information and situations. These three intelligent competencies would yield to more efficient and excellent performance (Boiatz, 2009). According to Boiatz’s model, the components of emotional intelligence competencies include self – awareness and self – management while social intelligence competency consists of three aspects of social awareness, empathy and relations management. Cognitive intelligence competency includes systemic thinking and model cognition ability.
3. Research background
In their studies, Monavarian and Amini (2009) found that effective knowledge management needs employees who share knowledge through ITC since these technologies can build communication channels for knowledge recognition and sharing. Magneyer and Senud (2008) concluded that knowledge sharing can impact on individual capabilities and organizational competencies simultaneously and can lead into fostering organization’s intellectual capitals capability in human and organizational capital areas. Hoof and Husman (2009) studied knowledge sharing management in six public organizations. In this research, the impact of organizational structure factors, cognitive social relations, IT, personal social relations and organizational culture on knowledge sharing was studied. The findings indicate that the existence of a flexible organizational structure, incentive organizational culture and wide utilization of ICT can impact on personal social relations and cognitive social relations positively.

In their paramount studies, Cho Hong (2009) introduced several barriers of information sharing in a closed information environment. They proved information and knowledge sharing and ways to improve such barriers. To this end, in his paper, Pavani (2009) developed a conceptual framework for knowledge sharing networks in complicated and professional systems. Palanisamy (2008) says that an organization which supports knowledge sharing among its members can define more effective processes and to promote its organizational performance. H. Sier (2004) emphasizes on knowledge sharing motivation among employees so that they can share knowledge without fear and as a natural process. Researches by Low and Ngai (2008) indicate that knowledge sharing in individual level is more important for organization since organizational knowledge is shaped based on people’s knowledge and individual knowledge has no impact on organization if it is not usable and accessible. Recently, many theories such as social cognition, economic exchange theory, social initiative theory and political power theory are used by researchers to predict affecting factors on knowledge sharing behavior. For instance, Bartol and Serivasta (2002) studied economic exchange theory to test the role of material incentives in encouraging knowledge sharing. Lin and Li (2006) studied planned behavior theory to assess factors to encourage knowledge sharing behavior by senior managers. Other studies are summarized in table 1.
Table 1: Literature review

<table>
<thead>
<tr>
<th>Results</th>
<th>Author</th>
<th>Affecting factors on knowledge sharing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confirming the impact by factors</td>
<td>Lin and Hung, 2009</td>
<td>Justice and trust</td>
</tr>
<tr>
<td>Confirming the impact by factors</td>
<td>Kresten et al, 2010</td>
<td>Organizational culture</td>
</tr>
<tr>
<td>Identifying barriers and providing guidelines</td>
<td>Wang and Noei, 2009</td>
<td>Cultural barriers of knowledge sharing</td>
</tr>
<tr>
<td>Many limiters and enablers are inside organizations among which people’s preferences are highlighted</td>
<td>Salazar, 2010</td>
<td>Limiters and enablers</td>
</tr>
<tr>
<td>Confirming the negative and significant impact of supportive leadership style and confirming the positive advisory and assigning leadership style</td>
<td>Sanjai, 2010</td>
<td>Leadership style</td>
</tr>
<tr>
<td>Confirming the impact of stimulators and facilitators</td>
<td>Wah et al, 2007</td>
<td>Trust and social capital</td>
</tr>
<tr>
<td>Confirming the impact of all three factors</td>
<td>Cohen Gokel, 2007</td>
<td>Organizational commitment</td>
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<td></td>
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<td>Organizational culture</td>
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<td></td>
<td></td>
<td>Job satisfaction</td>
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<tr>
<td>Confirming the impact of all three factors</td>
<td>Lin, 2007</td>
<td>Structure</td>
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<td></td>
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<td>Inter-unit interactions</td>
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<td></td>
<td></td>
<td>Organizational culture</td>
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<tr>
<td>Confirming the fact that knowledge sharing in individual level is more important for organization xince organizational knowledge is shaped based on people’s knowledge</td>
<td>Low and Ngai, 2008</td>
<td>knowledge sharing in individual level</td>
</tr>
<tr>
<td>Social capital predicts 27% of knowledge sharing behavior</td>
<td>Wah, 2007</td>
<td>Social capital</td>
</tr>
</tbody>
</table>
4. Methodology
A descriptive survey methodology is used in present study. The mission of surveys is to express status quo as a phenomenon. Data collection method is questionnaire. The items of the questionnaire are designed by Likert scale. Questionnaires were distributed among all population members. To answer the questions of respondents, their questions were personally answered during completing the questionnaire. Research population was 123 deputies and supervisors and experts. Data collection was done in spring 2014. Of 135 distributed questionnaires, 105 ones were completed and returned by which response rate was 85%. The first part of the questionnaire included demographical questions while the second part included questions of intelligent questions while the final part consisted of questions on measuring knowledge sharing behavior. Intelligent competency questionnaire includes three aspects of social intelligence (relations management, empathy and social awareness), emotional intelligence (self – awareness and self – management) and cognitive intelligence competencies (patterns recognition and systemic thinking) and their validity is proved in past studies (Haj Karimi, 2012). The validity of knowledge sharing behavior questionnaire is proved in credible scientific researches (Tseng, 2011). After small modifications on some questions, questionnaire total validity was supported by specialists. Questionnaire total reliability was proved by Chronbach’s apha (0.93).

5. Data analysis
According to table, we conclude that social competency and emotional competency impact on employees’ knowledge sharing behavior and achieved significant results as well correlation coefficients supports these impacts and relations. Emotional intelligence competency and social intelligence competency also impact on employees’ knowledge sharing behavior. the relevant results are outlined in tables 2 and 3.

As seen in above tables, there is a relationship between social intelligence competency and knowledge sharing behavior which is supported by significance level. An equation is achieved by above tables and multivariate regression.

<table>
<thead>
<tr>
<th>Knowledge sharing behavior</th>
<th>Pearson Correlation</th>
<th>Sig. (2-tailed)</th>
<th>N</th>
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<tbody>
<tr>
<td>EIC</td>
<td>.493**</td>
<td>.000</td>
<td>118</td>
</tr>
<tr>
<td>SIC</td>
<td>.592**</td>
<td>.000</td>
<td>118</td>
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</tbody>
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Table 3: Correlation Test
### 6. Conclusion

Despite of the existence of scientific documents on the importance of human and individual components and knowledge management processes, a few studies are conducted so far in this regard. It is attempted in present study to investigate their relationship between people’s intelligence traits and knowledge sharing behavior by using correlation and multivariate correlation. For the first time, present paper studies intelligence factors (self – management, self – awareness, systematic thinking, pattern recognition capability and relations management) which impact on knowledge sharing behavior. These studies indicate that social intelligence competency and emotional intelligence competency impact on knowledge sharing behavior positively and significantly. Based on acquired relations, it is suggested to consider intelligent components (relations management, self – awareness, social awareness and self – management) during employing knowledge – oriented employees. Concerning the prioritization of intelligent components which impact on knowledge sharing behavior, one can claim that among three intelligent component (cognitive, emotional, social), social intelligence competency has the highest impact on knowledge sharing behavior while cognitive intelligence correlation with knowledge sharing behavior is not supported.

Future research can study other intelligent components (verbal, non-cognitive, spiritual, and cultural, etc.) in other organizations and other types of human – individual components including psychological variables by using different statistical software.
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