

Research Article

**SURVEY THE RELATIONSHIP BETWEEN TEACHERS’
PSYCHOLOGICAL EMPOWERMENT AND DEVELOPMENT OF
KNOWLEDGE CREATION CAPACITY AT ELEMENTARY SCHOOLS
IN ARDABIL CITY**

Roghayeh Vaseghi^{1,2} and *Sadraddin Sattari^{1,2}

¹*Department of Educational Sciences, Ardabil Science and Research Branch, Islamic Azad University, Ardabil, Iran*

²*Department of Educational Sciences, Ardabil Branch, Islamic Azad University, Ardabil, Iran*

**Author for Correspondence*

ABSTRACT

The main objective of this study was to investigate the relationship between teachers’ psychological empowerment and the development of knowledge creation capacity at elementary schools in Ardabil in School Year 2014-2015. To this end, a descriptive-correlational research design was employed. The population under study consisted of all 1938 elementary school teachers in Ardabil. Cochran formula was used to determine the sample size. Accordingly, 320 elementary teachers were included in the final sample as respondents in this study using two-stage clustering. The data were collected through Hemati’s (2010) Knowledge Creation Standard Questionnaire and Spritzer’s (1992) Psychological Empowerment Standard Questionnaire. SPSS Software was used to analyze the collected data and regression analysis and Pearson correlation coefficient were used to test research hypotheses. The results showed that psychological empowerment and components such as a sense of competence, job meaningfulness, self-independence, being influential, and a sense of confidence have a significant relationship with the respondents’ knowledge creativity capacity.

Keywords: *Psychological Empowerment, Knowledge Creation Capacity, Teachers, Elementary Schools, Ardabil*

INTRODUCTION

Today, factors such as rapid development of information and communication technologies and growing movement towards globalization have made organizational environments very dynamic and turbulent. The knowledge-based organizations which are operating in such environments need to use innovative strategies in order to supply their products and adapt themselves to dynamic environmental conditions (Robins, 1997). Under such conditions, the development of new knowledge creation capacity can have a significant impact on organizations’ improved performance and their survival. Organizational innovation deals with designing and implementing changes in products, services, organizational structures, and processes. Innovation, by definition, refers to creation and application of knowledge. One of the objectives of implementing knowledge management projects is to develop innovation capacity in the organization through systematic and effective creation and application of knowledge. Knowledge management must be used purposefully to create organizational knowledge through employee’s knowledge synergy (Soliman & Spooner, 2000). Therefore, at present organizations are making great efforts to improve their innovation capacity and competitiveness by effective implementation of knowledge management projects (Hislop, cited in Monavarian and Asgari, 2012). Knowledge management has 4 basic dimensions including universalization, externalization, synthesis, and internalization (Hemati, 2010).

The significance and the role of human factor in taking effective knowledge management actions and creating and sharing knowledge in particular has made the preparation needed for active participation in knowledge management actions indispensable (Asgari, 2011). Staff’s active participation depends on their ability and willingness (Hislop, cited in Monavarian and Asgari, 2012). One of the important factors

Research Article

contributing to effective development and use of the staff's knowledge capacity is to satisfy their expectations and paving the way for developing their capabilities.

Employees' empowerment seems to be able to facilitate the creation and development of such favorable conditions. However, studies conducted on this issue are not enriched enough and the issue has not been often investigated empirically. Human resources empowerment means to create a set of capacities needed in employees to make them enable to create value added in the organization and perform the assigned roles and responsibilities within the organization (Babayei, 2002).

Empowerment does not mean to give power to individuals. Individuals possess a great deal of power (in the form of knowledge and motivation) by themselves and it enables them to perform their responsibilities perfectly. Therefore, empowerment means to release this power (Jafari, 2001). Psychological empowerment refers to enhancing intrinsic motivation to do assigned tasks and it is characterized by five components: a sense of competence, job meaningfulness, powerfulness, being influential, and a sense of confidence (Spritzer, 1992). Accordingly, the present study attempts to address the impact of employees' psychological empowerment on knowledge creation capacity in the organization. It also aims to systematically and reliably determine how and to what extent each component of psychological empowerment affects knowledge creation capacity in the organization. The study also seeks to rank these components in terms of their influence on developing knowledge creation capacity to find practical ways to develop knowledge creation capacity using each psychological empowerment components.

Ardabil Department of Education as one of the largest and most influential educational organizations tries to take some steps towards achieving more excellence in order to turn into a knowledge-based organization and use the existing knowledge in its structures and process, and human resources storage to achieve its desired perspective. The main question addressed in this study is: What is the relationship between teachers' psychological empowerment and the development of knowledge creation capacity at elementary schools in Ardabil?

MATERIALS AND METHODS

Methodology

The present study used a descriptive-correlational research design to investigate the relationship between teachers' psychological empowerment and the development of knowledge creation capacity at elementary schools in Ardabil. Concerning its objective, this study is an applied research. The population under study consisted of all 1938 elementary school teachers in Ardabil. Cochran formula was used to determine the sample size which included 320 elementary teachers were included in the final sample as respondents in this study using two-stage clustering. To this end, 10 schools were selected from each educational district and 16 teachers from each school. Finally, 160 elementary teachers (80 males and 80 females) were selected from each school with the final sample including 320 teachers (160 males and 160 females). In the first stage, the data were collected using library techniques such as note-taking. In the second stage, the data were collected through field methods including distributing questionnaires among respondents. The data were collected through Hemati's (2010) Knowledge Creation Standard Questionnaire and Spritzer's (1992) Psychological Empowerment Standard Questionnaire. Hemati's (2010) Knowledge Creation Standard Questionnaire contains 8 items with four components: universalization, externalization, synthesis, and internalization. Spritzer's (1992) Psychological Empowerment Standard Questionnaire contains 15 items with five components: a sense of competence, job meaningfulness, powerfulness, being influential, and a sense of confidence. Content validity was used to measure the validity of the questionnaires. To this end, the questionnaires were reviewed by some professors to check the appropriateness of items in measuring variables under study. Cronbach alpha coefficient was used to determine the reliability of the questionnaire as shown in Table 1:

Research Article

Table 1: Reliability of items

Variable	Number of items	Cronbach alpha
Knowledge creation	8	0.78
Psychological empowerment	15	0.81

The data collected through administering the questionnaires were codified and analyzed by SPSS Software. Descriptive and inferential statistics were used to analyze the data. Descriptive statistics include measures of central tendency, percentage, and frequency. These results were presented through frequency tables and graphs. Before running inferential statistics, Kolmogorov-Smirnov test was used to test the data normality. In addition, research hypotheses were tested using Pearson correlation coefficient and multivariate regression test.

RESULTS AND DISCUSSION

Results

Table 2 shows the respondents’ demographic characteristics:

Table 2: Respondents’ demographic characteristics

Variable	Description	Frequency	Percentage
Gender	Male	160	50
	Female	160	50
Age	Under 30	106	33.1
	30-40	130	40.6
	41-50	62	19.4
	Higher than 50	22	6.9
Education	Associate	42	13.1
	B.A	219	68.4
	M.A	59	18.4

As can be seen, 50% of the respondents were males and 50% were females. Besides, 33.1% of the respondents were under 30 years old, 40.6% were 30-40 years old, 19.4% were 41-50, and 6.9% were over 50 years old.

Concerning the education level, 13.1% had an associate degree, 68.4% held a B.A degree, and 18.4% had an M.A degree. Table 3 presents the results of Pearson correlation test to determine correlations between research variables:

Table 3: Results of Pearson correlation test

Dependent variables	Knowledge creation capacity components				
	Universalization	Externalization	Synthesis	Internalization	Total
Psychological empowerment	0.343**	0.543	0.503**	0.497**	0.607**
Sense of competence	0.036	0.374**	0.221**	0.221**	0.245**
Job meaningfulness	0.160**	0.181**	0.174**	0.323**	0.281**
Self-independence	0.100	0.344**	0.332**	0.282**	0.339**
Influence	0.271**	0.531**	0.508**	0.438**	0.559**
Confidence	0.340**	0.162**	0.208**	0.156**	0.277**

** Significant at 0.01

Research Article

As shown in the above table, it can be said that there is a positive significant relationship between the respondents' psychological empowerment and the development of knowledge creation capacity as the correlation value between these two variables is 0.06. In addition, there is a positive significant relationship between the respondents' psychological empowerment and variables including universalization, externalization, synthesis, and internalization. The strongest correlation was between respondents' psychological empowerment and externalization and the weakest correlation value was found between psychological empowerment and internalization.

It was also noted that there is a positive significant relationship between the respondents' feeling of competence and the development of knowledge creation capacity with a correlation value of 0.24. In addition, there is a positive significant relationship between the respondents' feeling of competence and variables including externalization, synthesis, and internalization. The strongest correlation was between respondents' competence and externalization and the weakest correlation value was found between feeling of competence and universalization.

The findings of the study also showed that there is a positive significant relationship between the respondents' job meaningfulness and the development of knowledge creation capacity with a correlation value of 0.28. Additionally, there is a positive significant relationship between the respondents' sense of job meaningfulness and variables including universalization, externalization, synthesis, and internalization. The strongest correlation was found between respondents' sense of job meaningfulness and internalization and the weakest correlation value was found between job meaningfulness and universalization.

In addition, a positive significant relationship was found between the respondents' self-independence and the development of knowledge creation capacity with a correlation value of 0.33. Furthermore, there is a positive significant relationship between the respondents' self-independence and variables including externalization, synthesis, and internalization. The strongest correlation was found between respondents' self-independence and externalization and the weakest correlation value was found between self-independence and universalization.

A positive significant relationship was found between the respondents' sense of influence and the development of knowledge creation capacity with a correlation value of 0.55. Besides, there is a positive significant relationship between the respondents' sense of influence and variables including universalization, externalization, synthesis, and internalization. The strongest correlation was found between respondents' sense of influence and externalization and the weakest correlation value was found between sense of influence and universalization. Table 4 shows a summary of the regression model:

Table 4: Summary of the regression model

Correlation value	R ²	Adjusted R ²
0.633	0.439	0.430

As can be seen in the above table, the correlation coefficient between the respondents' psychological empowerment and the development of knowledge creation capacity is 0.66 and the value of the coefficient of determination (R²) is 0.43. Table 5 shows the results of multivariate regression test:

Table 5: Results of multivariate regression test

Predictor variable	Nonstandard coefficients		Standard coefficients B	T	P
	Beta	SE			
Constant	-3.58	2.81	-	-1.27	0.20
Feeling of competence	-0.19	0.16	-0.06	-1.22	0.22
Job meaningfulness	0.27	0.11	0.10	2.32	0.02
Self-independence	0.57	0.19	0.14	2.94	0.003
Influence	1.52	0.16	0.52	9.50	0.001
Confidence	0.55	0.08	0.29	6.82	0.001

Research Article

As it is evident in the above table, of psychological empowerment components; job meaningfulness, feeling of self-independence, feeling of being influential, and confidence can predict the development of knowledge creation capacity at 95% level of confidence. The value of beta also shows that job meaningfulness, feeling of self-independence, feeling of being influential, and confidence can predict 10%, 14%, 52%, and 29% of variances in the development of knowledge creation capacity.

Conclusion

The results of the present study indicated that there is a positive significant relationship between teachers' psychological empowerment and the development of knowledge creation capacity. In other words, it can be said that teachers' increased psychological empowerment will increase the development of knowledge creation capacity. This is in line with the results of a study by Asgari *et al.*, (2013) who found a positive significant relationship between teachers' psychological empowerment and the development of knowledge creation capacity. Similarly, O'Neil and Adia (2007) observed a positive significant relationship between psychological empowerment in the organization and the development of knowledge creation capacity.

Our findings also suggested that there is a positive significant relationship between teachers' sense of competence and the development of knowledge creation capacity. In other words, it can be said that teachers' increased sense of competence will enhance the development of knowledge creation capacity. This can be explained in the light of the fact that a sense of competence can enhance a person's self-confidence to engage in working issues and make attempts for improvement and change. Having a sense of competence makes one value his/her implicit knowledge and experience and make attempts to improve his/her performance. Such a feeling also helps a person to believe that he possesses valuable knowledge and experience that can be used by others and this means to create new knowledge through socialization. This is supported by Asgari *et al.*, (2013) who found a positive significant relationship between sense of competence and the development of knowledge creation capacity.

Results of this study showed that there is a positive significant relationship between teachers' sense of job meaningfulness and the development of knowledge creation capacity. In other words, it can be said that teachers' increased perception of job meaningfulness can increase the development of knowledge creation capacity. In addition, the perception of job meaningfulness can create extrinsic motivation among employees. One of the most important factors leading to intrinsic motivation is the feeling of having an important and valuable job and the alignment of individual values with vocational values. Such motivation can increase employees' attempt to create knowledge creation through internalization (changing explicit knowledge into implicit knowledge) and synthesis (changing implicit knowledge into explicit knowledge), resulting in their improved performance. This is supported by Asgari *et al.*, (2013) and O'Neil and Adia (2007) who found a positive significant relationship between sense of job meaningfulness and the development of knowledge creation capacity in the organization.

According to the results of this study, a positive significant relationship was found between the respondents' self-independence and the development of knowledge creation capacity with a correlation value of 0.33. Furthermore, there is a positive significant relationship between the respondents' self-independence and variables including externalization, synthesis, and internalization. The strongest correlation was found between respondents' self-independence and externalization and the weakest correlation value was found between self-independence and universalization.

Having the right of power and decision making (self-organization) enables knowledge workers to recognize their strengths and weaknesses, eliminate their weaknesses, and enhance their strengths. This will increase their ability for using their creativity and producing new ideas. In addition, the most important outcome of self-organization is to allow oneself to make mistake and not considering making mistake as a wrong act in vocational issues. Fear of outcomes of being defeated and subsequent blaming often hamper looking for trialing new ways.

The findings of this study are consistent with the results of Asgari *et al.*, (2013) who found a positive significant relationship between the sense of self-independence and the development of knowledge

Research Article

creation capacity. Similarly, O'Neil and Adia (2007) found a positive significant relationship between the sense of self-independence and the development of knowledge creation capacity in the organization.

The results of the present study indicated that there is a positive significant relationship between teachers' perception of being influential and the development of knowledge creation capacity. In other words, it can be said that teachers' perception of being influential will promote the development of knowledge creation capacity.

The belief in being influential will strengthen the feeling of having the ability needed to change in a positive direction, influencing the status quo, the results obtained. Such a belief cause one to have a feeling of attachment and possession to his job and its outcomes and be always concerned with improving his performance. Therefore, the person will find the possibility of enhancing his efforts to create knowledge through all four modes of Nunaka's model. This finding is consistent with the results of Asgari *et al.*, (2013) and O'Neil and Adia (2007) who observed a positive significant relationship between the sense of being influential and the development of knowledge creation capacity in the organization.

Finally, the present study found that there is a positive significant relationship between teachers' confidence and the development of knowledge creation capacity. In other words, it can be suggested that teachers' enhanced self-confidence will promote the development of knowledge creation capacity.

Knowledge creation especially through socialization requires a high level of cooperation and participation among people and this is done if there is a high level of trust among them. Friendly relations, encouraging employees to help each other when solving problems, promoting honest behaviors, putting emphasize on keeping promises and commitments, paying more attention to meritocracy in the organization, confronting destructive political behaviors in the organization, and effective management of organizational conflict can strengthen the trust needed for enhancing cooperation among members of the organization. This finding is in keeping with the results of Asgari *et al.*, (2013) and O'Neil and Adia (2007) who observed a positive significant relationship between trust and the development of knowledge creation capacity in the organization.

The results of multivariate regression suggested that of psychological empowerment components; job meaningfulness, feeling of self-independence, feeling of being influential, and having confidence can predict the development of knowledge creation capacity. The value of beta also shows that job meaningfulness, feeling of self-independence, feeling of being influential, and confidence can predict 10%, 14%, 52%, and 29% of variances in the development of knowledge creation capacity. This is consistent with the results of a study conducted by Asgari *et al.*, (2013) who concluded that a sense of competence, job meaningfulness, having power, being influential, and perceiving trust in the organization are significantly related to the development of knowledge creation capacity.

The results of the present study are contrary to the results of a study by Seyed *et al.*, (2008). They concluded that five factors including paying attention to personal growth and job design, attention to human resources and work teams, focus on leadership styles, formality, and transparency, attention to environment, and decentralization affect employees' empowerment. In contrast, the results of the present study indicated that psychological empowerment components affect the development of employees' knowledge creation capacity. One possible reason for such inconsistency is that the authors in the above study did not consider psychological empowerment when addressing employees' empowerment.

Suggestions

Based on the results of the present study, the following suggestions are offered to improve the development of knowledge creation capacity in elementary schools of Ardabil.

Management attempt to reduce bureaucracies and formal and written regulations concerning how to perform organizational responsibilities and tasks, participating employees in problem solving processes, encouraging innovative behaviors, granting more power to employees can enhance the sense of having influence and self-organization as well as the perception of job meaningfulness among employees.

Promoting informal relations and interactions in the organization, increasing the power granted to employees on how to carry out their responsibilities and tasks, facilitating communication flow among

Research Article

different organizational units, granting decision-making power to employees who have access to appropriate information, holding regular meetings to exchange information between authorities and employees, and making it possible for employees to have access to documents and information can strengthen this belief in employees that they have the ability of performing the assigned tasks.

Knowledge employees possess expertise and know-how, which increases their commitment. Such employees must be controlled internally. It should be acknowledged that high empowerment is in contrast to close monitoring and control. By using internal controls, it is possible to enhance professional commitment and a sense of self-organization among these employees.

Managers are required to create a context where employees share their knowledge and experience and at the same time make sure that this will not endanger their job position. The organization managers are also encouraged to embark on cultural modeling which refers to sharing knowledge and power not to hoard them.

This can be done through the following actions: encouraging employees to share their knowledge and experience, holding group discussions to exchange ideas, creating a friendly and trustable environment among employees, providing bulletins and holding group discussions to make decision in especial cases, increasing interaction among officials and employees, facilitating employees' access to information related to their jobs, and promoting communications among employees whose works are interrelated. Such actions can enhance a feeling of power and trust among employees.

Proving a context so that members of the organization come up with sufficient and acceptable understanding of each other, emphasis on transparency, empathy, openness, and acceptance in interaction among members, creating an environment for cooperation and empathy among the members, commitment to openness, exchanging views and values in the organization, observing justice among employees, unifying the claim and action, facilitating and encouraging the exchange of information, and the use of religious teachings to build trust among members of the organization can promote a sense of trust among them.

REFERENCES

- Abdullahi B and Naveh Ebrahim A (2006).** *Empowerment: Golden Key of Human Resource Management* (Tehran: Virayesh).
- Abtahi SH and Abesi S (2007).** *Employee Empowerment* (Karaj: Institute for Management Research and Education, Khorshid Publisher).
- Aghayar S (2003).** Empowerment: a new method in the competitive environment. *Journal of Tadbir* **135**.
- Akhewan P and Baferi A (2010).** *Knowledge Management, from Idea to Practice* (Tehran: Atinegar).
- Alavi M and Leidner DE (2000).** Review: knowledge management and knowledge Management systems: conceptual foundations and research issues. *Organization Studies* **14**(4).
- Alavi M and Leidner DE (2001).** Review: knowledge management and knowledge Management systems: conceptual foundations and research issues. *MIS Quarterly* **25**(1).
- Asgari N (2011).** Developing a model on the effects on social-human factors on knowledge management actions. Phd Dissertation in Executive Management: School of Management, University of Tehran.
- Asgari N, Kheirandish M, Gholami M and Khalatbary M (2013).** The impact of employees' psychological empowerment on development of knowledge creation capacity in the organization. *Journal of Information Technology Management* **5**(1) 107-126.
- Babaei A (2002).** Employee empowerment: An irreplaceable capital. *Journal of Tadbir* **169** 86-97.
- Bandura (1977).** Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review* **84** 191-215.
- Benins W and Nanus B (1985).** *Leaders: the Strategies for Taking Charge* (New York: Harper & Row).
- Blackler F (1995).** The Knowledge, Knowledge Work and Organization: An overview and interpretation. *Organization Studies* **16**(6).
- Bowen DE and Lawler EE (1992).** The Empowerment of service workers: What, why, who, when. *Sloan Management Review* **33**(3) 31-9.

Research Article

- Cartwright Roger (2002).** Empowerment. Easton publishing. *The Empowerment Process: Integrating Theory & Practice*, edited by Conger Jay A and Kanungo Rabindra N (1998), *Academy of Management Review* **13**(3) 471-482.
- Cosa T (2003).** *Knowledge Management*, translated by Afzar Kanjin Z (2008) (Tehran: Pardis Danesh).
- Davenport T and Prosak L (2000).** *Knowledge Management*, translated by Rahmanseresht H (2000) (Tehran: Sapco Press).
- Dewettinck Koen, Singh Jagdip and Buyens Dirk (2003).** Psychological Empowerment in the Workplace: Reviewing the Empowerment Effects on Critical Work Outcomes. Belgium, Koen Dewettinck, Vlerick Leuven Gent Management School, Working Paper Series.
- Drydyk J (2008).** Empowerment and power: some conceptual analysis. Carleton University, Ottawa.
- Duffy Jo Ann, Barragan Bob and Riley Brenda (1994).** A Study of Employee Empowerment in Small Business. *Proceeding of the Southwestern Small Business Institute Association Proceedings*.
- Eskandari M (2002).** Designing and explaining manager empowerment model: Case of Hajj managers. PhD Dissertation: School of Management, University of Tehran.
- Farahani A, Ajam Q, Azizian Kohan N and Seraj S (2011).** The relationship between the psychological factors of organizational empowerment and entrepreneurship among employees at Department of Physical Educations in Khorasan Razavi Province. *Sports Management* **8** 44-51.
- Fragoso Heloisa (1999).** An Overview of Employee Empowerment: Do's and Don'ts. *Indiana University Undergraduate Research Conference*.
- GAO (2001).** *Human Resource Management in the Hospitality Industry* (Wiley).
- Gill Amarjit, Flaschner Alan B and Bhutani Smita (2010).** The Impact of Transformational Leadership and Empowerment on Employee Job Stress. *Business and Economics Journal* BEJ-3.
- Gorelick C (2005).** Organizational Learning vs. the Learning Organization: A Conversation with a Practitioner. *The Learning Organization* **4**(12) 383-388.
- Habibi A (2008).** *Implementing Knowledge Management in Engineering Organizations* (Tehran: Arg Publication).
- Harabadi Farahani M (2005).** Relationship between organizational structure and employee empowerment. Master Thesis: University of Tehran.
- Hemati M (2010).** Assessment of application of knowledge management components of the knowledge in technical colleges in Tehran. *Proceedings of the First National Conference on Knowledge Management*.
- Hislop D (2012).** *Knowledge Management in the Organization*, translated by Monavvarian A and Asgari N (Tehran: Industrial Management Organization).
- Jafari Qushchi B (2001).** Ways to empower employees. *Journal of Tadbir* **119** 36-39.
- Kanooni Arman (2005).** The Employee Empowerment in Information Technology Department. Capella University. COMP8004 – Managing and Organizing People.
- Karakoc Nihat (2009).** Employee Empowerment and Differentiation in Companies: A Literature Review and Research Agenda. *Enterprise Risk Management* **1**(2) E1.
- Khoshniyat E and Fathizadeh A (2008).** Employee empowerment: Necessities and solutions. *Journal Management Research* **5**(1).
- Kim S, Sub E and Hwang H (2003).** Building the Knowledge Map: An Industrial case Study. *Journal of Knowledge Management* **7**(2).
- Liebowitz J (2009).** *Knowledge Management: Findings from Knowledge Engineering*, translated by Hassanzadeh M (Tehran: Ketabdar).
- Nonaka E and Taguchi H (2006).** *Knowledge Creating Companies: How Japanese Companies Make Innovation Possible?* translated by Attafar (2006) (Qom: Sama-e Qaem).
- Robbins S (1997).** *Organization Theory: Structure Design, Applications*, translated by Alvani SM and Danaeifard H (Tehran: Saffar).

Research Article

Saifollahi N and Davari MR (2009). *Knowledge Management in Organizations* (Free Books Publishing Institute).

Salehi Sedghiani J and Dehaghn NA (2010). The relationship between psychological empowerment aspects and employees' creativity using multivariate regression (Case study of technical services and engineering companies in Tehran). *Qualitative Studies in Management* **1** 30-48.

Seyed Javadin SR, Haidari H and Shahbazmoradi S (2009). Factors affecting human resources empowerment in services: Case of banking system. *Public Administration* **1**(2).

Siqing Shan, Qihong Zhao and Fan Hua (2013). Impact of quality management practices on the knowledge creation process. *Computers & Industrial Engineering* **64** 211–223.

Sivan Y (2000). Tips for Building Knowledge Infrastructure, Note 8, *Knowledge Processes Webnet Journal* **2**(4).

Soliman F and Spooner K (2000). Strategies for implementing knowledge management: role of human resources management. *Journal of Knowledge Management* **4**(4) 337-45.

Vatan D and Cameron KA (2004). *Empowerment and Granting Power*, translated by Badroddin Oraei Yazdani (Tehran: Institute of Management Research and Education).

Wilkinson Adrian, Godfrey Graham and Marchington Mick (1997). Bouquets, Brickbats and Blinkers: Total Quality Management and Employee Involvement in Practice, Manchester School of Management. Forthcoming Organization Studies.

Yim Hong Kit (2008). Psychological Empowerment of Salespeople: The Construct, Its Inducement, and Consequences on Customer Relationships. A Thesis Submitted to the Faculty of Drexel University.