

## CASE STUDY

# Studying the influence of emotional intelligence on the organizational innovation

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**ABSTRACT:** In the last decades, large organizations have paid more attention to the topics such as creativity and innovation in organizational level because of changes and evolutions in the increasing competition field and unreliable environmental conditions. This research investigates the influence of emotional intelligence on the organizational innovation. This research is considered application-oriented and descriptive regarding the objectives and data collection method, respectively. Statistical population of the research included 300 employees from whom 169 employees were selected as statistical sample applying simple random sampling method and Cochran's formula. Data collection was performed on the basis of standard questionnaires of emotional intelligence and organizational innovation. Questionnaire's stability was calculated as 0.88 applying a Cronbach's alpha coefficient. The obtained data were analyzed by applying regression and correlation coefficients in software SPSS. Research results showed that emotional intelligence and its dimensions had a significant positive influence on the organizational innovation in the employees.

**KEYWORDS:** *Emotional intelligence; Organizational innovation; Self-awareness; Sympathy; Tehran Municipality*

## INTRODUCTION

Nowadays, considering sweeping changes, successful and effective organizations are those organizations which can predict changes and transformations and direct these changes in the way to create optimal transformations in order to make a better future in addition to adjust with contemporary society changes (Talebi *et al.*, 2015). The creativity, innovation and entrepreneurial works are essential components in organizational levels to produce novel products and services in order to make optimal

transformations regarding unstable and challenging environment in new age (Andriopoulos and Lowe, 2000). Nowadays, entrepreneurship is known the backbone for economic development in all societies and plays an important role in the employment, revenue and social changes especially in developing countries (Ihugba *et al.*, 2014). Hence, determining the roles of different dimensions of emotional intelligence, including sympathy, self-awareness, and self-management and relations management in organizational innovation and identifying the various relations among these dimensions in order to increase

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innovation in the organizations the main functions of this research. The main objective of this research is to study the influence of Emotional Intelligence (EQ) on the organizational innovation in district 11 of Tehran municipality.

In various researches it is known that encouraging organization's staff to perform entrepreneurial works and enhancing organizational innovation which will result in organizational success depends on various factors and EQ is considered as one of those factors (Ngah and Salleh, 2015; Ahmetoglu et al., 2011). Zampetakis et al., (2009) in his study found that EQ is one of the most important factors in organizational innovation. Also, Livingston and Doerr (2012) noted that the organizations should pay more attention to EQ and emotional controlling methods in order to achieve more entrepreneurial performance and direct employees toward such activities.

It can be mentioned that employees with high EQ have more capabilities to adjust and manage their emotional behaviors in order to make positive interactions and achieve the organizational goals quickly. EQ is a type of organizational intelligences which includes identifying emotions of organizational human resources and applying them to make appropriate decisions in the organization (Dong et al., 2014). In Baron's (2006) opinion, EQ is defined as non-cognitive abilities, effective skills and capabilities such that the people who possess them can overcome situational stresses. Jourdan et al., (2008) defined EQ as a series of social and emotional skills which influence on individual abilities to face environmental demands and pressures. In Nelson and Low's (2011) opinions, EQ refers to recognize and control oneself emotions and feelings and others' and direct oneself thoughts and operations using them. In addition, Gorji et al., (2014) indicated that EQ would reduce the conflicts among people, help them to solve their problems and direct them toward entrepreneurial works in the organizations.

Finally, Goleman (1998) suggested that EQ as a proficiency provides the ability to control individual moods by self-awareness, improve individual morale by self-management, realize it's efficiency by sympathy and behave such that enhance individual morale and others' by relations management. He defined four components of EQ as follows:

**Self-awareness**= ability to identify and understand emotions, feelings, weaknesses and strengths of oneself.

**Self-management**= Ability to dominate individual emotions and feelings, relax oneself, release oneself from anxieties and think before attempt to do something.

**Sympathy**= Ability to have high energy and predisposition to achieve goals beyond obtaining money and prestige.

**Relations- management**= Ability to manage relations and build a network to achieve desired results.

Therefore, it can be suggested that competition among organizations and also their involvement in various areas have caused that organizations attempt significantly to make more creative, more innovative and more entrepreneurial their works considering EQ approach.

### *Innovation*

Innovation is essential for companies and organizations, since it can provide stable competitive advantages for them (Weerawardena et al., 2006). Innovation is supposed as realized creative thoughts (Higgins, 1999). Innovation is a novel dynamic process in a certain organization and has two aspects: novelty and initiation (Cheung et al., 2011). Innovation is generated from every new idea, method or goal taken by one organization and finally is conducted successfully in the market. Now, innovation is thought as a basis for business achievements in 21th century. Innovation means removing old paradigms and is considered as the most significant feature for an organization to develop (Zheng, 2008). It can be suggested that innovation is supposed to be as a novel, constructive and successful changes in the market, which result in promoting the performance level of the organization in order to survive and flourish and expand in the since various types of innovation influence on the Organizational performance by various methods and will result in various results (Siguaw et al., 2006). Other researchers have provided various indicators for innovations. These indicators are generally arranged in one classification which are as follows: production innovation which means providing production tools to provide and develop improved new products and services. Administrative innovation means adopting new or improved methods to produce products or deliver services. Finally, process innovation refers to novel procedures, policies and organizational configurations (Jimenez et al., 2008). Therefore, it can be suggested that EQ facilitates innovation by increasing and promoting cooperation

and coordination between employees and various department in the organization. (Nahapiet and Goshal, 2000; Brooks and Nafukho 2006; Goyal and Akhilesh 2007; Doh and Acs, 2010). Brooks and Nafukho (2006) indicated that EQ can influence on organizational performance by generating innovation, sharing knowledge and reducing deal expenditures, etc. Kaasa *et al.*, (2007) reported that EQ, especially its structural aspects in the forms of formal and informal networks and civil partnership, has positive effects on innovation activities. Morales and Fernandez (2010) in their research entitled “emotional intelligence effects on organizational innovation” conclude that there is a positive correlation among department’s unity, emotional intelligence and innovation that can suggest appropriate instructions for policy- makers and individual entrepreneurs. Alguezaui and Filieri (2010) investigated emotional intelligence effects on innovation and concluded that EQ could have both positive and negative effects on innovation in the organizations. Perez-Luno *et al.*, (2010) indicated in their study that how EQ and knowledge can influence on innovation. They found that rich combination of EQ and tacit knowledge will direct the organization towards innovation.

Laursen *et al.*, (2012) in their study entitled “how localized emotional intelligence influences on innovation and external knowledge acquisition” concluded that high level of EQ results in high innovation. With the aims of enhancing human resource efficiency and protecting citizenship rights in the organizational objective framework, Tehran

municipality as an organization which depends on human resource capabilities attempts to take a great step towards development by discovering responsible human resource talents and competencies and appointing them as a strategic partner in Tehran urban management.

With this attitude, this research was conducted in district 11 of Tehran municipality in 2017 in order to investigate the following topics. Previous studies showed that EQ as an effective factor was related to innovation. The following research hypotheses were developed by examining both main structures, that is, emotional intelligence and organizational innovation:

**Main hypothesis:** Organizational emotional intelligence can influence on organizational innovation generation.

**Hypothesis 1:** Self-awareness of an organization’s staff affects the innovation of that organization.

**Hypothesis 2:** Self-management of an organization’s staff affects the innovation of that organization.

**Hypothesis 3:** Sympathy among the organization’s staff can influence on innovation of that organization.

**Hypothesis 4:** Relations-management of an organization’s staff affects the innovation of organization.

*Research theoretical framework*

Considering the main goal of this research that is emotional intelligence’s effects on organizational innovation and also research hypothesis, a theoretical framework (Fig.1) was provided as shown in following diagram.



Fig. 1: Research conceptual model

## MATERIALS AND METHODS

On the basis of the objective, this research is application-oriented. And regarding data collection method and type of collected data this research is considered descriptive and quantitative, respectively. Statistical population included 300 employees from first, second and third in district 11 of Tehran municipality. 169 employees were selected as the statistical sample using Cochran formula. The questionnaires were distributed among them applying simple random sampling method. Causality relations among the research variables were analyzed using correlation test and Pearson test in the SPSS software. In this research, EQ and organizational innovation variables are the main structures. Research structure and the dimensions and number of questions are explained in Table 1.

Measurement tools appropriateness was examined by reliability scale. Cronbach's alpha method in SPSS software, version 21 was applied to estimate the reliability value. The results are provided in Table 2. Since all coefficients are more than 0.7 it is obvious that the measurement tool has an acceptable reliability level.

Having examined tool appropriateness, the research variables were discussed in the considered community. The obtained results are provided in Table 3.

According to above Table, since t-values are more than 1.96 in both variables and their dimensions and consequently significance levels are less than 0.05. It can be suggested that reliability level of 0.95 is in optimal condition regarding respondents, variables, conditions and studied dimensions in this organization. In order to achieve innovation in the organization, more attention, rewards and value should be provided for the staff and appropriate proceedings should be taken to improve their condition. Having discussed variables situation in the studied population the EQ and its dimensions effects on the organizational innovation have been evaluated. The evaluation was conducted using regression and correlation tests in the SPSS software.

To study variables effects on each other, correlation coefficient test was performed. The obtained results from correlation coefficient test are shown in Table 4.

Since significance level of this test in all hypotheses was less than 0.05 the positive significant correlation between EQ and its dimensions with organizational innovation was confirmed.

Table 1: Research structures, dimensions and items

Structure	Dimensions	items (questions)
Emotional intelligence (Goleman, 1998)	Self-awareness	5
	Self-management	9
	Sympathy	7
	Relations-management	7
Organizational Innovation (Jimenez et al., 2008)	Product- innovation	3
	Process- innovation	3
	Administrative innovation	3

Table 2: Results of research structure's Cronbach- $\alpha$

Variable	Self-Awareness	Self-management	Sympathy	Relations-management	Production innovation	Process innovation	Administrative innovation
?	0.88	0.87	0.86	0.86	0.87	0.88	0.87

After correlation coefficient test, regression test was conducted to study EQ and its' dimensions effects on organizational innovation. As it is obvious from the obtained results (Table 5), EQ and dimensions of it has a positive significant influence on the organizational innovation. The results

showed that EQ predicts the organizational innovation by 57%. In addition, the results suggested that relations- management had the highest predictive power among the emotional intelligence dimensions and it could predict the organizational innovation by 95%.

Table 3: Results of single sample T- test

Component	T –value	Significance level	Test result
Self- awareness	3.267	0.000	Optimal condition
Self- management	6.677	0.000	Optimal condition
Sympathy	5.465	0.000	Optimal condition
Relations- management	3.401	0.014	Optimal condition
Production innovation	5.820	0.040	Optimal condition
Process innovation	7.625	0.000	Optimal condition

Table 4: Results of correlation coefficient test

Hypotheses	Relation between the variables	Significance level	Correlation coefficient	Test result
Main hypothesis	Emotional intelligence and organizational innovation	0.000	0.71	Confirmed
Hypothesis 1	Self- awareness and organizational innovation	0.000	0.38	Confirmed
Hypothesis 2	Self- management and organizational innovation	0.000	0.43	Confirmed
Hypothesis 3	Sympathy and organizational innovation	0.000	0.60	Confirmed
Hypothesis 4	Relations- management and organizational innovation	0.000	0.67	Confirmed

Table 5: Results of regression test

Hypotheses		Significance level	Regression coefficient	Test result
Main hypothesis	Emotional intelligence effects on organizational innovation	0.000	0.57	Confirmed
H1	Self- awareness effects on organizational innovation	0.000	0.60	Confirmed
H 2	Self- management effects on organizational innovation	0.000	0.40	Confirmed
H 3	Sympathy effects on organizational innovation	0.000	0.65	Confirmed
H 4	Relations- management effects on organizational innovation	0.000	0.95	Confirmed

## RESULTS AND DISCUSSION

It was suggested in various studies that individuals with well- trained emotional skills are satisfied in their lives. They have special intellectual habits such that lead them to be active and effective. The people who can't manage their emotional lives are involved in their internal tensions which reduce their ability for concentrated works and enlightenment and consequently hinder creative ideas known as entrepreneurship elements. Hence, it seems that emotional intelligence can play a prominent role in generating creative ideas and realizing entrepreneurship process. EQ has a significant positive influence on the employee's innovation which shows entrepreneurship motivation among the employee (Tajpour et al., 2015).

The main hypothesis results showed that EQ had a significant positive influence on the employees of district 11 of Tehran municipality. It means the more EQ in the organization, the more organizational innovation proceedings. It can be concluded that the employees with high EQ have the essential skills to achieve satisfactory interaction, control themselves and manage others' emotions. These skills reinforce popularity, leadership power and personal authority and promote the person in his (her) social activities and intimate relations and direct the person toward creative activities. In this regard, Goleman et al., (2002) indicated that the people with vitality and good feelings think about other people or events optimistically. This mentality helps employees to be more optimistic about

their abilities to achieve a certain goal and it will lead to increase creativity and enhance decision- making skills and it Prepares people to be effective in their community. Then, it is concluded that people with high EQ compared with people with low EQ probably have a high independence spirit and achievement motivation, improved decision- making skills and high creativity which result in high succulence and motivation and consequently innovation in Tehran municipality. In research hypotheses, it is indicated that self- awareness means gaining a deep understanding about individual emotions, strengths and weaknesses, needs and motivation; self- management refers to the ability to direct the feelings in the positive path; sympathy means the ability to recognize others' feelings in dealing with them; relation- management means the ability to communicate people and participate in team-work. The above mentioned abilities have positive influences on the organizational innovation. In other words, the organizations which attempt to reinforce these abilities in their staff can expect that entrepreneurs in the organization will be involved in innovative procedures and will make greater achievements in the organization.

## CONCLUSION

Research results suggest that EQ and dimensions of it have a positive significant influence on the organizational innovation of the employees of district 11 of Tehran municipality and it is recommended to enhance the staff's motivation and creativity, support

them and promote their ideas in order to improve the organization proceedings. Therefore, regarding the confirmed hypotheses, it is suggested to improve staff's EQ in both individual and organizational levels. In addition, more attention should be paid to train and reinforce EQ skills in the organizational level since with high EQ the employees can understand and manage their personal emotions and others' and thereby enhance the organizational innovative procedures.

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#### **CONFLICT OF INTEREST**

The authors declare that there is no conflict of interests regarding the publication of this manuscript.

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