

Relationship between emotional intelligence and entrepreneurial behavior

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Abstract

Aims: In large organizations, supporting entrepreneurial behavior at all hierarchical levels for growth and increasing competitive advantages, is necessary. The aim of this research was to study of relationship between emotional intelligence and entrepreneurial behavior in a medical sciences university.

Methods: This study is a descriptive and cross-sectional study conducted in the second half of 2011 in a medical sciences university. Sampling included 96 people. Standard questionnaire of Wong & Law has used for gathering data regarding emotional intelligence and entrepreneurial behavior. Samples selected randomly and used spearman correlation and Mann-Whitney tests to examine statistical significance by SPSS 17.

Results: Findings showed that there is a significant relation between all dimensions of emotional intelligence including self-emotional appraisal, others' emotional appraisal, and regulation of emotion and use of emotion and entrepreneurial behavior ($p < 0.01$). Analyses demonstrated that other's emotional appraisal, regulation of emotion and also uses of emotion have high effects on entrepreneurial behavior. Furthermore findings indicated that there is no significant difference among men and women ($p > 0.05$).

Conclusion: Nowadays, entrepreneurial behavior in organizations can't be ignored. Employees that have high level of emotional intelligence can control their feelings. Therefore they can experience better behavior in the workplace that enables them to act entrepreneurial.

Keywords: Entrepreneurial Behavior, Corporate Entrepreneurship, Emotional Intelligence

Introduction

The research shows that entrepreneurship at the organization level and entrepreneurial behavior can be regarded as new competitive advantage [1]. Entrepreneurial behavior in the organization is said of all activities related to discovery, assessment and exploitation from entrepreneurial opportunities which are done by the organization's members [2, 3]. Public organizations have a prominent role in the many countries' process of development, in particular developing countries. But due to various reasons, these organizations in the third world countries lose their functionality gradually in response to diverse and increasing demands. Many writers and forerunners of changes in the organization and public management services consider entrepreneurship as more effective and more responding and define as the basis of public management in facing upcoming challenges. Also, some researchers believe that entrepreneurship behavior is a vital and comprehensive necessity for all levels of the organization, including public, private, etc. [4]. In big organizations, to improve function and to increase competitive advantage, entrepreneurship behaviors should be supported at all hierarchical levels and this issue is of vitality. In general,

entrepreneurship inside organizations will lead to increase in profitability and development in organizations, revision of strategies and organizational change and customer's added value services [5]. Piaget discovered that emotions affect thoughts and mentioned time and again that it is not possible to consider recognition without considering emotions [6]. Viner who started his work with educational success and failures, mentioned in his documentary theory that excitability reactions are in relation not only with success and failure experiences, but also with describing or documenting to one's definition of success and failures [5].

One of factors involved in corporate entrepreneurship is the staff's high emotional intelligence; emotional intelligence has an obvious role in the people's desired functionality in comparison with other capabilities such as intellectual or technical skills and both organization and staff can benefit from the advantages of developing emotional intelligence and its capabilities. Some scientists believe that humans should have high emotional intelligence, in addition to having Intelligent Quotient (IQ) so as to increase functionality [7]. Emotional intelligence is the ability to comprehend, describe, receive and control emotions [8]. Life incidences can be positive or negative; from

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the most horrible incidences like a close person's death or losing a much-wanted job to positive occurrences like marriage and meeting an old friend. At the same time, the way humans react to these shapes the life's outcomes. Emotional intelligence is the way of reacting to life's small and big incidences. In a way that it is expected that people with low emotional intelligence have less compatibility capacity facing tensions in life and more exposed to depression and hopelessness. On the other hand, people who benefit from high emotional intelligence will respond more compatibly to life's negative incidences. Besides, principally people who have high emotional intelligence organize and stabilize their lives, in a way that experience less negative incidences during lifespan [9].

There evidences, showing that personality will affect the creation and emergence of entrepreneurship [10]. In theoretical stage, emotional intelligence is an extent in which the individual tends to think process and operate based on innately emotional information both in an extrovert and introvert fashion. Emotional intelligence refers to a set of behavioral tendencies, and individualistic understanding related to the individual's capability to recognize the process and use emotional information and is mostly considered as personal trait rather than an ability of conscious recognition [11].

In terms of predicting individualistic entrepreneurial behavior in the organization's environment, emotional intelligence has a key advantage over ability criterion. As yet, little attempts have been made to determine whether the emotional intelligence trait plays a role in entrepreneurial process or not. The findings of recent researches show that the managers' emotions who are perceived by their employees will affect the staff's tendency to act entrepreneurially [12]. Staff who benefit from high degrees of emotional intelligence trait, tend to control their emotions more and as such, experience more confidence and better control over their workplace demands which will enable them to act entrepreneurially [13]. *Mir* has declared some information in this regard and has shown experimentally that a manager's ability to control feelings and thoughts will have positive effects on the entrepreneurial behavior created in the organization's context [14].

The emotional intelligence trait will affect entrepreneurial behavior by two key processes. The first and foremost is self-assessing of emotional usefulness. Staff possessing high perceived emotional intelligence will probably show high tolerance in the face of stress and environmental stress-inducing

factors [15, 16]. Therefore, they are more capable in assessing and controlling personal emotions. For example, they recognize feelings related to hopelessness and then control these feelings so as to reduce stress; as such, the extent of their entrepreneurial behavior increases. The second process is recognition; people possessing high perceived emotional intelligence tend to be more effective and to appear creative and active and to communicate and therefore, facilitate entrepreneurial behavior. For example, there are evidences which show that private positive affecting will probably lead to more creative conduct and on-time reaction [17]. Recent research works show the increasing value of emotional intelligence trait in comparison with personality and other psychological structures in predictable and effective variables [18]. In *Ahemtoghlu* et al.'s research, they concluded that individual differences in terms of emotional intelligence will lead to the difference in entrepreneurial behavior [19]. The results of the study done in a meta-analysis fashion showed that there is a positive relation between emotional intelligence and job functionality [20]. Also, with respect to a study's results, manager's emotional intelligence cannot be used to direct entrepreneurship [21]. The effect of emotional intelligence trait on job satisfaction has been shown as an effective mediator [22]. Staff with high emotional intelligence normally has more job satisfaction since they are more able to control their personal emotions in comparison with those of staff who have lower emotional intelligence level [23].

On this basis, the main objective of this study was to investigate the relation between emotional intelligence and staff's entrepreneurial behavior at one of Iran's medical sciences universities.

Methods

This descriptive study was done in a cross-sectional fashion in 2011. The statistical society under investigation was the staff working at one of Iran's medical sciences universities. The least sample volume was determined 96 subjects, using Cocoran formula, and that a larger number of subjects were allowed to participate with respect to the possibility of decrease in things to be experimented, due to factors such as not returning the questionnaire or lack of interest in answering the questionnaire and eventually, 96 questionnaires were returned. The sampling method was clustering and randomization.

The required data was collected using questionnaire instruments. To measure emotional intelligence, *Wang*

& La's standard questionnaire was employed and to measure entrepreneurial behavior, Pierce's standard questionnaire was used [11, 20]. The employed questionnaire included 16 questions related to emotional intelligence and 6 questions related to entrepreneurial behavior. Responses were divided in the form of five-option Likert scale. Despite the fact that the questionnaire was standard, its validity was confirmed by the experts and its reliability was confirmed by using Cronbach's Alpha method, amounting 0.888, so as to ensure its accuracy. The analysis of the data was done, using SPSS 17 software, descriptive indexes of frequency percentage and mean and standard deviation, and Spearman rank correlation, step-by-step regression, and Mann Whitney and Wilcoxon tests. It is necessary to mention that at the beginning, Kolmogorov-Smirnov test (K-S test) test was used to investigate the normal distribution of quantitative variables which turned out that the distribution of all variables was non-normal (Table 1). Spearman rank correlation was used to investigate the relation between emotional intelligence, its dimensions and entrepreneurial behavior and Mann Whitney and Wilcoxon test was used to investigate entrepreneurial behavior among two groups of men and women.

Table 1- The results of Kolmogorov-Smirnov test (K-S test) with level of confidence 0.99 (n=96)

Variables and components	Kolmogorov-Smirnov test Z	Level of significance
Entrepreneurial behavior	2.971	0.0001
Emotional intelligence	1.907	0.001
Emotional self-assessing	2.468	0.0001
Emotional assessing of others	3.470	0.0001
Using emotions	2.150	0.0001
Organizing emotions	2.949	0.0001

Results

80 subjects (75%) of the subjects investigated were men. The average age was 44 ± 37 years of which the lowest was 29 and the highest was 54 years of age. In terms of work experience, 62 subjects (64.6%) had more than 20 years, 31 subjects (32.3%) had between 10 and 20 years, 3 subjects (3.1%) between 5 and 10 years. In terms of education level, 8 subjects (8.4%) were holding diploma and associate degree, 31 subjects (32.6%) were holding bachelor degree, 44 subjects (43.6%) were holding Master of Arts degree, and 1 person (1.1%) were holding professional PHD and 11 subjects (11.6%) were holding specialist PHD. In terms of frequency of each degree, 3 subjects

(3.2%) held the degree of 12, 5 subjects (5.4%) held the degree of 13, 24 subjects (25.8%) held the degree of 14, 9 subjects (9.7%) held the degree of 15, 35 subjects (37.6%) held the degree of 16, 17 subjects (18.3%) held the degree of 17.

The highest rank in terms of organizational status among the subjects under investigation was the rank of 18 and the lowest was 12. Also, the highest percentage of frequency belonged to the rank 17 with the frequency of 46.6% and the lowest percentage of frequency belonged to the rank 12 with the frequency of 1.1%.

Mean and standard deviation of the variable of entrepreneurial behavior, emotional intelligence and its dimensions are provided in Table 2.

Table 2- Mean and standard deviation of the variable of entrepreneurial behavior, emotional intelligence and its dimensions (n=96)

Variables and components	Mean	SD
Entrepreneurial behavior	4.27	0.337
Emotional intelligence	4.10	0.302
Emotional self-assessing	4.08	0.345
Emotional assessing of others	4.17	0.401
Using emotions	4.17	0.401
Organizing emotions	4.16	0.340

Emotional intelligence and its dimensions including emotional self-assessing, emotional assessing of others, organizing emotions and using emotions had a significant relation with entrepreneurial behavior (Table 3).

Table 3- Correlation matrix of emotional intelligence and its components together with entrepreneurial behavior

Variables and components	1	2	3	4	5
1 Emotional self-assessing	-				
2 Emotional assessing of others	0.494	-			
3 Organizing emotions	0.545	0.501	-		
4 Using emotions	0.493	0.496	0.493	-	
5 Emotional intelligence	0.762	0.720	0.734	0.793	-
6 Entrepreneurial behavior	0.478	0.542	0.537	0.424	0.567

Also, the dimension of emotional assessing of others, organizing emotions, and using emotions had the most effectiveness and predictability in the staff's entrepreneurial behavior respectively (Tables 4 and 5). There was no significant statistical difference relation between men and women's average entrepreneurial behaviors (Table 6).

Table 4- The analysis and multi-variable regression concerning predictable components of emotional intelligence to predict entrepreneurial behavior

Mode I	Coefficient of multiple correlations	Coefficient of determination	Adjusted coefficient of determination	Standard error
*1	600	360	354	271
**2	666	444	433	254
***3	689	474	459	248

*Predicting variable= emotional assessing of others
 ** Predicting variables=emotional assessing of others, organizing emotions
 *** Predicting variables=emotional assessing of others, organizing emotions, using emotions

Table 5- Standard and non-standard coefficients for predicting entrepreneurial behavior

Variables	Non-standard coefficient		Beta standard coefficient	Level of significance
	Beta	Standard deviation		
Fix amount	1.239	0.323	-	0.0001
Emotional assessing of others	0.281	0.077	0.334	0.0001
Organizing emotions	0.263	0.087	0.266	0.003
Using emotions	0.192	0.079	0.225	0.017

Table 6- Mann Whitney and Wilcoxon test results for investigating entrepreneurial behavior in two groups of men and women with 95% confidence level

Gender	Number	Mean of rank	Sum of ranks	Mann Whitney test	Wilcoxon test	z	Level of significance
Male	73	56.29	0.471	873.000	1251.000	-1.524	0.128
Female	23	46.33	0.327				

Discussion

In the present age, with respect to changes and developments in organizations, human force is considered an important and strategic component in increasing efficiency and effectiveness of the organizations. The possession of human force committed to organizational objectives and capable of entrepreneurial behavior can not only be counted as an excellence factor but also is considered as a competitive advantage in the organization in comparison with other organizations. One of factors introduced in organizational area is staff and manager's emotional intelligence in the organization. Lately, emotional intelligence is paid attention more than ever and the results of research show that emotional intelligence is at least as effective as subjects' IQ when it comes to subjects' success and organization's success and it can be said that despite the fact that IQ is the moving force in changes and developments of twentieth century, the new evidences still show that at the beginning of 21st century,

emotional intelligence will lead to developments [8, 24].

Corporate entrepreneurship is defined as entrepreneurship process within existing organizations without considering its vastness and scales and not only leads to the creation of new jobs, but also includes other innovative activities and affairs such as developments in productions, services, technology, managerial techniques and new competitive strategies or situations [25]. In general, it can be said that the main feature of entrepreneurial organizations is that these organizations are equipped with capabilities which will be enabled to better exploit from existing opportunities and from more adaptability with their surroundings, in addition to efficiency promotion.

The results of this research showed that there are significant relations among emotional self-assessing, emotional assessing of others, organizing emotions, using emotions and staff's entrepreneurial behavior. Subjects with high capability of emotional self-assessing can manage their spontaneous feelings and troublesome emotions, even in working moments full of tensions appropriately and stay calm as well [26]. Also, Mir also showed in his research that managers capable of higher self-evaluation will act more entrepreneurially in a more probable way [14]. *Zampetakis & Cross's* study confirmed this finding [27, 28].

In terms of the component such as emotional assessing of others, managers and staff should try to recognize colleagues' feelings and emotions and those of other staff and be curious in this respect. *Janghorabani* has stated in this respect that perceiving other emotionally and desired interpersonal relationships will lead to the creation of collaboration spirit and cooperation in the organization in a way that staff will be able to exploit the existing opportunities in a suitable way by cooperating with each other and to increase the rate of entrepreneurial behavior in the organization instead of competing against each other [29]. *Cross's* research findings also confirm this [28].

In organizing emotions, managers and staff should not only establish friendly relationships with each other, but also these relationships should be entirely goal-oriented and organized. To do so, managers should develop an expansive network of communications in the organizations. Also, the staff will show more entrepreneurial behavior when they have high emotional intelligence and are able to control, organize and perceive their emotions and those of others [27].

In the component of using emotions, managers and staff who are able to exploit their emotions

appropriately will be able to have better relations and communication with each other and as such, will behave in their workplace entrepreneurially. The use of emotions so as to solve entrepreneurs' problems and daily functions is crucial [8]. *Janghorabani* and *Zampetakis*'s studies confirm this finding [27, 29].

Overall, the research finding showed that there is a significant relation between emotional intelligence and staff's entrepreneurial behavior. The results of this research confirmed the results of previous researches like those of *Janghorabani*, *Hadizadeh*, *Naseri*, *Boren*, *Fertala*, *Zampetakis*, *Rhee* and *Cross* concerning the effects of emotional intelligence and its components on entrepreneurship and entrepreneurial behavior [26, 27, 28, 29, 30, 31, 32, 33].

The results derived from step-by-step regression analysis showed that the dimensions of emotional assessing of others, organizing emotions and using emotions will have the most effect on the staff's entrepreneurial behavior respectively. In other words, those who are more able to perceive others' emotions and can communicate with others using their emotions and feelings more effectively, and can overcome anxiety and nervousness quicker will demonstrate more entrepreneurial behavior. According to the results of this research, it is possible to use the existing relation between emotional intelligence and staff's entrepreneurial behavior for educational and training purpose; in a way to reinforce entrepreneurial behavior by forming or reinforcing emotional intelligence. With respect to this research's results, the following suggestions are offered for future researches:

- 1) The use of boards in the organization's buildings and the writing of short sentences on the boards to encourage subjects to behave appropriately towards one's and other's emotions and feelings.
- 2) With respect to the point that there is the possibility of emergence of entrepreneurial behavior in those with high emotional intelligence, it is suggested that the organization use emotional intelligence as an index of promotion and substitution schemes and that different tests be taken from the organization's subjects such as emotional intelligence test both written and interview and then subjects be promoted as chief managers on the basis of derived results.
- 3) Most researches on emotional intelligence have been quantitative in nature. With respect to the point that the concept of entrepreneurship is an interdisciplinary concept, to understand better the relation between emotional intelligence and entrepreneurial behavior, it is advised that qualitative research be used. Investigating the relation between

emotional intelligence and entrepreneurial behavior from other perspectives can facilitate the researches in this area.

4) Most questionnaires related to measuring emotional intelligence investigated the concept of emotional intelligence in general. It is suggested that more exact questionnaires related to the concepts of management and entrepreneurship be made and be used in future researches. Also, it is possible to use analytical methods such as meta-analysis, etc and to measure research model using structural equation methods.

Among the limitations of this research are the non-cooperation of some staff working at the university, the use of self-assessing questionnaire which may affect the data and also the problems and limitations related to the provision the required permissions to do research due to its military nature.

Conclusion

There is a significant relation between emotional intelligence and staff's entrepreneurial behavior at the medical sciences university under investigation. In a way that the staff capable of high levels of emotional intelligence tend to monitor and control their feelings better. As a result, they experience a better conduct in the workplace which enables them to act entrepreneurially. Therefore, it is possible to use the existing relation between emotional intelligence and staff's entrepreneurial behavior for educational and training purposes.

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