

## The Effect of Emotional Intelligence on Entrepreneurial Behavior: A Case Study in a Medical Science University

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**Abstract:** Nowadays with complex and dynamic environment in organizations, scholars make more attention to emotional intelligence. Also, the role of emotional intelligence started to make inroad into entrepreneurship research. The purpose of this study is to examine the effect of emotional intelligence on entrepreneurial behavior in organizations. A sample of 107 managers from a medical science university in Iran participated in the main study. Findings showed that all four dimensions of emotional intelligence have a positive effect on entrepreneurial behavior. This study has theoretical and practical implications for managers and leaders in organizations.

**Key words:** Emotional intelligence, entrepreneurial behavior, Medical Sciences University

### INTRODUCTION

The formations of new business corporations, and innovation of products, services and processes, are very important to every organization. Start new business corporations and also innovations in organization can be done through independent individuals or by existing corporations. Nowadays, organization environment is very complex and dynamic. Entrepreneurial behavior in organization can help for the facilitation of rapid change and innovation within existing corporations. Within organizations, managers and leaders try to enhance competitive advantages and uniqueness. In this regard, (Kuratko *et al.*, 2005) argue that effective entrepreneurial behavior is a necessary step to achieving various organizational goals.

Another field of research which scholars make more attention in past decade is emotional intelligence. Previous studies point out that emotional intelligence has positive effect on performance (Goleman, 1998; Wong and Law, 2002; Slaski and Cartwright, 2003; Piperopoulos, 2010). (Baron, 2008) argue that positive emotions may enhance entrepreneurial creativity, including opportunity recognition.

Entrepreneurship, defined as “the discovery and exploitation of profitable opportunities” (Shane and Venkataraman, 2000). A key question which arise here is “why, when, and how some people and not others discover and exploit these opportunities?” (Venkataraman, 1997); and also, why within the same company some managers act entrepreneurially and others don't (Mair, 2005). Some scholars asserted that emotional intelligence may be the missing factor in entrepreneurship research (Cross and Travaglione, 2003; Mair, 2005) which can be the answer of these questions. Thus, in this study we purposed that emotional intelligence may be effect on entrepreneurial behavior in organization.

### LITERATURE REVIEW

**Entrepreneurial behavior:** Entrepreneurial behavior defined as a set of actions or series of actions to exploited entrepreneurial opportunities rivals which have not noticed or exploited (Kuratko, 2007) and occur over time (Gartner *et al.*, 2003). The study carried out by (Thompson, 2004) stat that successful enterprises and effective corporate entrepreneurship need both ideas and people. In other words, they have to pay attention to the identification and development of people with entrepreneurial potential as same degree as new product development (Thompson, 2004). In this vein, (Zampetakis, 2009) argue that Individuals can have entrepreneurial behavior by cooperate with their colleagues to meet challenges from top management or customers.

Emerging evidence suggests that effective entrepreneurial behavior by managers is a essential step to achieving various organizational goals (Kuratko *et al.*, 2005). Recent research has also indicated that entrepreneurial behavior is an individual level phenomenon (Gartner *et al.*, 2003) not firm behavior (Bird and Schjoedt, 2009). Organizations managers always need to balance exploration of new resource combination with exploitation of existing organizational capabilities (Mair, 2005). In this regards, they should develop and maintain entrepreneurial behavior in different levels of organizations, especially managerial levels. (Mair, 2005) argue that managers and leader of organization can act entrepreneurial behavior through three ways; first, they lead and guide their subordinates; second build and organize their unit; and third meet challenges from customers and markets.

According to (Bird and Schjoedt, 2009) entrepreneurial behavior is outcome of the cognitions and emotions of entrepreneurial actors. In other words, when

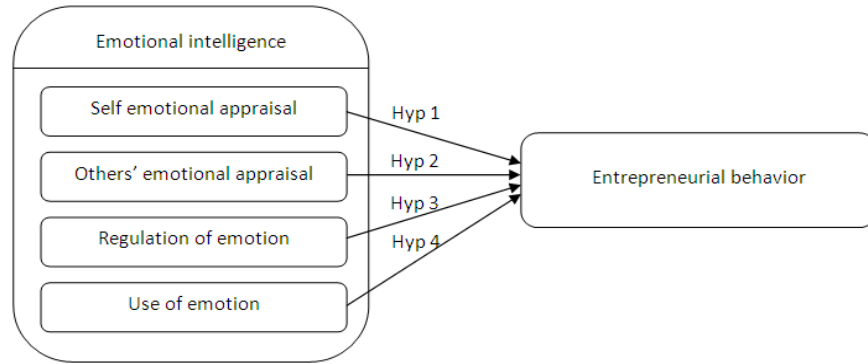


Fig 1: Model for empirical test

managers understand emotion well, they can use it in order to act entrepreneurial. The study carried out by (Foo, 2011) state that emotions influence risk perceptions and preferences which to be associated with entrepreneurial behavior.

**Emotional intelligence:** Foo (2011) reported that new stream of emotion studies have started in entrepreneurship research. Some scholar find out that positive emotion can cope with stress (Carver and Scheier, 2001), facilitate creativity and heuristic processing (Baron, 2008), and also, improve decision making (Foo, 2011). Similar studies (Baron, 2008; Biniari, 2011) have shown that emotions have positive effect on entrepreneurship field. Another construct which related to emotion is emotional intelligence. Salovey and Mayer (1990) define emotional intelligence as a set skills which is “accurate appraisal and expression of emotion in oneself and in others, the effective regulation of emotion in self and others, and the use of feelings to motivate, plan, and achieve in one's life”. Goleman (1998) take more attention and try link between leadership and emotional intelligence. He found that Intelligence Quotient (IQ) is not more important factor in achievement at work than emotional intelligence.

Some scholars assert that emotional intelligence is missing factor in the entrepreneurship research and discussion (Cross and Travaglione, 2003; Piperopoulos, 2010), and also development of entrepreneurship is related to a capability of an individual to analyze his/her emotions and values (Zakarevius and Župerka, 2010). In particular, several studies suggested that emotional intelligence has a positive effect on creativity (Zhou and George, 2003; Zampetakis *et al.*, 2009) which it is one of the most important core competencies for entrepreneurs. Recent research findings indicate that emotional intelligence is a key component of strategic leadership capability and affects competitive advantage through leadership and strategic change (Voola *et al.*, 2004). Moreover, there is evidence that managers possess emotional intelligence capable of controlling their emotional displays can motivate entrepreneurial action

among employees (Brundin *et al.*, 2008) and also impact on innovation, creativity, and ultimately the performance and competitiveness of the SME (Piperopoulos, 2010).

Eventually previous studies suggested emotional intelligence can improve during one's life and also increased through appropriate education and training (Goleman, 1998; Rozell *et al.*, 2002). Slaski and Cartwright (2003) found that training of 60 British managers increase in their emotional intelligence, (Prati, 2004) research also confirms this result.

In this study, we have used (Wong and Law, 2002) definition of emotional intelligence as a set of interrelated abilities possessed by individuals to deal with emotions. Wong and Law (2002) developed new four dimensions emotional intelligence scale which it is base on (Mayer and Salovey, 1997) emotional intelligence model. Wong and Law (2002) new scale composes of:

- **Self Emotional Appraisal (SEA):** Individual's ability to understand and assessment of their deep emotions and be able to express these emotions naturally.
- **Others' Emotional Appraisal (OEA):** Ability to perceive and understand the emotions of other people around them.
- **Regulation of Emotion (ROE):** Peoples' ability of people to regulate their emotions, which will enable a more rapid recovery from psychological distress.
- **Use of Emotion (UOE):** Ability of individuals to make use of their emotions by directing them towards constructive activities and personal performance.

To summarize, we focus our attention on the relationship between four dimensions of emotional intelligence and entrepreneurial behavior. In this regards, we formulate the following four hypotheses (Fig. 1):

- Hypothesis 1:** Self emotional appraisal has positive effect on entrepreneurial behavior.
- Hypothesis 2:** Others' emotional appraisal has positive effect on entrepreneurial behavior.

Table 1: Descriptive statistics, correlations, and reliabilities

	M	SD	N	1	2	3	4	5	6	7	8	9
Gender	1.25	0.436	107	-								
Age	44.46	6.156	107	0.046	-							
University degree	2.89	1.102	102	0.073	0.080	-						
Career	3.59	0.614	104	0.068	0.721**	0.462*	-					
SEA	4.08	0.345	107	0.072	0.142	0.127	0.092	-				
OEA	4.17	0.401	107	0.039	0.321**	0.167	0.166	0.494**	-			
ROE	4.16	0.340	107	0.097	0.120	0.114	0.087	0.545**	0.501**	-		
UOE	3.97	0.395	107	0.040	0.131	0.103	0.044	0.493**	0.496**	0.493*	-	
EB	4.27	0.337	107	0.148	0.191*	0.145	0.227*	0.478**	0.542**	0.537**	0.424**	-

Note1. male = 1, female = 2; Note2. University degree (diploma and under = 1, graduate = 2, postgraduate = 3, PhD and above = 4); Note3. Career ([5≤] = 1, [6-10] = 2, [11-20] = 3, [20≥] = 4); \* p≤0.05; \*\* p≤0.01

**Hypothesis 3:** Regulation of emotion has positive effect on entrepreneurial behavior.

**Hypothesis 4:** Use of emotion has positive effect on entrepreneurial behavior.

### METHODOLOGY

**Participants:** The sample consisted of managers from a medical science university in Iran. Surveys were sent directly to 140 managers and total of 107 completed surveys were returned for a response rate of 42%. The managers in the sample included 80 males (74.7%) and 27 females (26.3%). Their ages ranged from 29-45 years (M = 44.26, SD = 6.15). Nearly, 68% were aged over 40, with only 1.9% aged 30 or below. Almost 63% participants had over 20 years career. With regard to participants' university degree, 64% indicated that they are postgraduate or PhD.

**Procedure:** A letter was sent to 250 randomly selected managers from a total population of a medical science university. The letter explained the purpose of the survey and was accompanied by a questionnaire assessing managers' emotional intelligence and entrepreneurial behavior together with demographic variables. After completing the survey, participants were thanked for taking part in this study. The participation of managers in the present study was voluntary and there was no monetary incentive to complete the study.

**Measures:** All the constructs were assessed with self-report measures based on multi-item scales. Responses to all items were made on 5-point Likert scales from strongly disagree (1) to strongly agree (5).

**Emotional intelligence:** In order to assess emotional intelligence, we use self-report Wong Law Emotional Intelligence Scale (Wong and Law, 2002) which is comprising 16 items, organized into four dimensions: Self Emotional Appraisal (SEA), Others' Emotional Appraisal (OEA), Regulation of Emotion (ROE), Use of Emotion (UOE). Example items include: "I have a good sense of why I have certain feelings most of the time"; "I always

know my friends' emotions from their behavior"; "I always set goals for myself and then try my best to achieve them" and "I am able to control my temper and handle difficulties rationally". Cronbach's alpha for this scale was (0.83).

**Entrepreneurial behavior:** (Pearce *et al.*, 1997) 9 items self-report scale was utilized to measure entrepreneurial behavior. Example items include "I display an enthusiasm for acquiring new skills"; "I encourage my colleagues to take the initiatives for their own ideas"; and "I create a co-operational and team working climate in my department in order to meet a challenge". Cronbach's alpha (0.78) coefficient for the items was at satisfactory levels.

**Control variables:** We controlled for several other variables that influence emotional intelligence(Wong and Law, 2002) and entrepreneurial behavior(Pearce *et al.*, 1997). Age, gender and education were used as control variables in the present study. Also, the number of years at the current position was used as a control variable.

**Analytical strategy:** The managers of a medical institute were chosen as the unit of analysis. First of all, the normal distribution was assessed using single sample Kolmogorov-Smirnov test. Second, we used spearman correlation to analyze the relationship between emotional intelligence and entrepreneurial behavior. Then, Mann-Whitney tests were employed for comparisons between groups; and at last, the kruskal-wallis signed-rank test for paired data sets to examine statistical significance throughout this study.

### RESULTS

The Kolmogorov-Smirnov Z-test indicated a no normal distribution; In this regard, we used nonparametric tests such as Mann-Whitney, kruskal-wallis and spearman for correlation test. Table 1 reports the means, standard deviations, correlations, and coefficient alpha (a) internal consistency reliability estimates of the variables. In support of Hypothesis 1, the self emotional appraisal was related to entrepreneurial behavior and the correlation was

moderate ( $r = 0.47$ ,  $p < 0.01$ ). Hypothesis 2 postulated a positive impact of the amount of others' emotional appraisal has positive effect on entrepreneurial behavior correlated moderately. In line with Hypothesis 2, Table 1 shows that others' emotional appraisal correlated positively with income ( $r = 0.54$ ,  $p < 0.01$ ). Hypothesis 3 predicted that regulation of emotion has positive effect on entrepreneurial behavior; this hypothesis, too was supported by the data and the correlation was good ( $r = 0.53$ ,  $p < 0.01$ ). Turning to Hypothesis 4, Use of emotion was moderately related to the entrepreneurial behavior, as predicted ( $r = 0.42$ ,  $p < 0.01$ ). Mann-Whitney tests were then conducted to determine if there was statistically significant agreement between man and woman's entrepreneurial behavior. The result shows that there isn't any difference between man and woman's entrepreneurial behavior ( $p = 0.128$ ). Also, kruskal-wallis test shows that entrepreneurial behavior differences among managers' university degrees are not significant ( $p = 0.21$ ).

## DISCUSSION

The article proposes that all four dimensions of managers' emotional intelligence were positively related to entrepreneurial behavior. Furthermore, our analyses demonstrated that there isn't any difference between man and woman's entrepreneurial behavior and also entrepreneurial behavior differences among managers' university degrees are not significant.

Overall, these findings appear can be the answer of (Venkataraman, 1997) question which argued that "why, when, and how some people and not others discover and exploit these opportunities?". We believe that high emotional intelligence of organization's managers can effect on their entrepreneurial behavior and therefore they can discover and exploit opportunity better. Also, we argue that emotional intelligence should consider as one of important antecedent of entrepreneurial behavior in organization and has to pay more attention. Our findings confirm previous results (Mair, 2005; Zampetakis, 2009; Zampetakis and Kafetsios, 2010) which suggesting that emotional intelligence can effect on entrepreneurship. In keeping with effect of self monitoring on entrepreneurial behavior (Mair, 2005), our results demonstrated that self emotional appraisal related to entrepreneurial behavior. Our study revealed that others' emotional appraisal related significantly to entrepreneurial behavior which is in line with previous research suggesting that entrepreneurs are high in empathy (Rhee and White, 2007).

In keeping with recent studies (Zampetakis and Kafetsios, 2010), we found regulation of emotion as one of dimensions of emotional intelligence positively related to entrepreneurial behavior. In addition, we found

evidence that use of emotion related to managers' entrepreneurial behavior which confirm previous result (Zampetakis, 2009).

**Limitations and future research:** Limitations of this study included the use of self-report methodologies which highly rely on a person's self understanding and cause the problems of socially desirable responding and common method variance. In future studies, qualitatively investigate the concept of emotional intelligence could be done. Future studies should also use mediator like creativity, networking and other personality in future studies.

**Implications:** With regard to practical implications, our study shows that emotional intelligence has positive effect on managers' entrepreneurial behavior. Also, analyses indicated that all four dimensions of emotional intelligence (self emotional appraisal, others' emotional appraisal, regulation of emotion and use of emotion) related to entrepreneurial behavior. This might indicate that managers with higher emotional intelligence can be expected to discover and exploited opportunity better. In other words, managers' ability to understand and regulate emotions in himself/herself and others would influence their entrepreneurial behavior and they are more successful than others managers.

In contrast to other aspects of personality, emotional intelligence can enhance through training (Goleman, 1995). In this vein, provide emotional intelligence training course for managers might improve their entrepreneurial behavior.

## CONCLUSION

Entrepreneurial behavior can be define as discovery, evaluation, and exploitation of entrepreneurial opportunities (Shane and Venkataraman, 2000) and also, exploit entrepreneurial opportunities rivals which have not noticed or exploited (Kuratko, 2007). Nowadays, with dynamic environment we can't neglect the significant of entrepreneurial behavior in organizations. In this regards, emotional intelligence is a missing factor in entrepreneurship studies (Cross and Travaglione, 2003; Mair, 2005) might effect on managers' entrepreneurial behavior. The current study shows that all dimensions of emotional intelligence correlate with entrepreneurial behavior. Moreover, results indicate that there isn't any difference between man and woman's entrepreneurial behavior and also entrepreneurial behavior differences among managers' university degrees are not significant.

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