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## The Effect of Emotional Capital on Individual Innovativeness: A Research on Bahcesehir University Business Administration Undergraduate Students

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### Abstract

There are lots of factors influencing individual innovativeness. One of these factors is seen as emotions of individuals. In this regard, the aim of this study was determined as to investigate whether or not there is influence of university students' emotional capitals on their individual innovativeness. The universe of the research is business administration undergraduate students studying at Bahcesehir University in Istanbul. In this respect, a survey was conducted with 217 business administration undergraduate students via using random sampling method. In order to measure emotional capital, Emotional Capital Inventory developed by Newman and Purse (2007) with 77-items and shortened by Newman et al. (2015) with 30-items, and to measure individual innovativeness, Individual Innovativeness Scale developed by Hurt, Joseph & Cook (1977) with 20-items was used. For data analysis, SPSS 22.0 computer program was used. In terms of data analysis, frequency analysis, descriptive statistics, factor analysis, reliability analysis, regression analysis and variance analyses were made. According to factor analysis made on Emotional Capital Inventory, there were found 6 dimensions as social awareness, self-reliance, self-awareness, relationship management, adaptability and self-management. Results of the research indicated that total emotional capital had a positive influence on total individual innovativeness. Moreover, self-reliance, relationship management and adaptability dimensions of emotional capital had positive influences on total individual innovativeness. In terms of Independent Samples T Test Analysis made according to gender variable, there was determined significant difference only for self-management dimension of emotional capital on behalf of male students. Lastly, in terms of Independent Samples T Test Analysis made according to nationality variable, there was determined significant difference only for relationship management dimension of emotional capital on behalf of Turkish students.

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## 1. Introduction

Effects of individuals' emotions on their behaviors were not investigated until last few years so much. However lots of researchers started to study on how emotions affect performance, satisfaction, innovativeness, intention, behavior and etc. It can be said that emotions are influential on also rational decisions and behaviors.

Today in many fields such as education life, private life and job life, the role of emotions and innovativeness are gradually increasing. Information and communication technologies have developed continuously around the world, and the need for innovative individuals have been risen. In this regard, emotional intelligences, emotional capitals and innovativeness of university students who are tomorrows' employees and employers should be investigated. Thus, in this research, the effect of emotional capital and its dimensions on individual innovativeness in terms of university students were investigated.

It can be said that there are some studies in the literature measuring the factors affecting individual innovativeness. However, emotional capital is a relatively new concept; thus, there is no research in the literature about the relation between emotional capital and innovativeness. In this regard, it was benefited from the relation between emotional intelligence and innovativeness in this study. After all, it can be said that this research will contribute to the literature via determining the relation between emotional capital and innovativeness, and measuring the effect of emotional capital factors on individual innovativeness of university students.

## 2. Theory and hypothesis development

Emotional capital is defined abilities or habits transforming the management of emotions into various social benefits [1]. Moreover, emotional capital is about the beneficial sources in terms of individual's personal, professional and organizational development [2]. Emotional capital can be stated with emotional sources such as support, patience and loyalty [3]. The concept was developed by Nowotny (1981) [4]. However, the concept was firstly used by Jackson (1959) [5]. Emotional capital theory was developed as a form of social capital [3-4]. In this regard, emotional capital is the social and cultural sources emerged as the result of relations [6]. Emotions are personal and resulted from individual's feelings, and emotions shape individual's behaviours, relations, important decisions and even economic activities [7]. Emotional capital consists of affective assets and affective liabilities as in balance sheets in accounting [8].

Individuals diverge from each other in terms of their prone to the innovativeness [9]. In this regard, the success of an innovation depends on individuals' differences in company with other factors [10]. Individual innovativeness is described as the desire of individual to adapt with the innovativeness [11]. Individuals can have different attitudes towards innovativeness according to their characteristic features. Moreover, it can be said that individuals do not display the same innovativeness behaviour during all of their lives; thus, their educations and the environment where they live can shape their behaviours [12].

Emotional intelligence is defined as the ability to finish the works and to be creative [13]. Individual innovation is seen as an important dimension of learning which comprises rational, intuitional, affective and social processes, and also emotions play important role in individuals' to produce new things [14]. Positive emotions develop creativity, thus get people inclined to individual innovativeness [15]. Moreover, affective environment with good quality affects efficiency and creativity [16]. In a study, the role of emotional intelligence on entrepreneurs' innovativeness in terms of entrepreneurship success was investigated, and it was found that positive emotional intelligence increases innovativeness resulting in entrepreneurship success [17]. In another study, the relations between working teams' social capital, emotional intelligence, cognitive intelligence and innovativeness were investigated [18]. Moreover, in a study investigating the influence of emotional intelligence on organizational innovation, it was found that emotional intelligence and its dimensions had significant and positive effects on organizational innovation in the employees [19].

Given these points, the following hypotheses are proposed:

H1: Emotional capital influences individual innovativeness.

H1a: Social awareness influences individual innovativeness.

H1b: Self-awareness influences individual innovativeness.

H1c: Relationship management influences individual innovativeness.

H1d: Adaptability influences individual innovativeness.

H1e: Self-management influences individual innovativeness.

### 3. Methodology

#### 3.1. Measures and model

In this study, to measure emotional capitals of the participants, Emotional Capital Inventory developed by Newman and Purse (2007) [20] with 77 items, and shortened by Newman, Purse, Smith and Broderick (2015) [21] to 30 items with 5 dimensions was used. These dimensions are social awareness, self-awareness, adaptability, relationship management and self-management. Moreover, in order to measure individual innovativeness of students, Individual Innovativeness Scale developed by Hurt, Joseph and Cook (1977) [22] with 20 items was used.

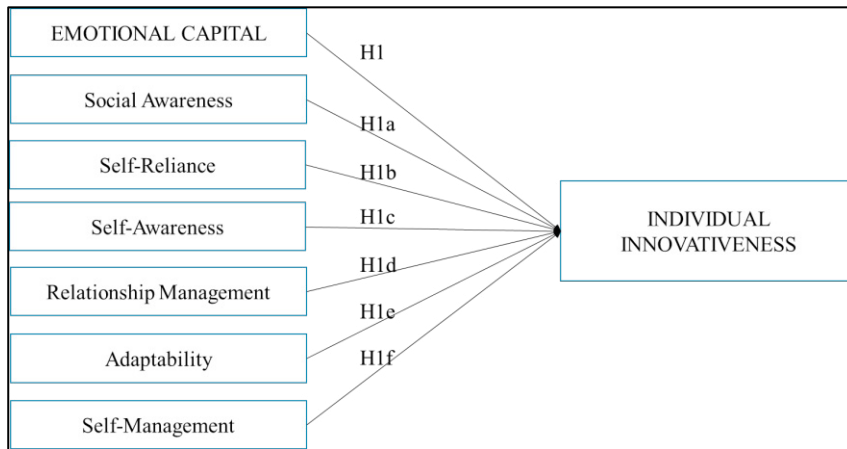
In Table 1, factor and reliability analysis results for Emotional Capital Inventory can be shown. According to the results, there emerged 6 factors as social awareness, self-reliance, self-awareness, relationship management, adaptability and self-management. Furthermore, sample size is adequate for factor analysis according to KMO and Bartlett Test results. Moreover, total explained variance is more than %60. Also, all reliability results of dimensions are more than 0,700 which are enough. Moreover, reliability analysis was made for Individual Innovativeness Scale, and the result emerged as 0,836.

Table 1. Factor and reliability results for emotional capital inventory

	SOA	SR	SEA	RM	AD	SM	Reliability	Scale
D7	,827							
D6	,777							
D8	,713						0,794	
D9	,633							
D10	,613							
D30	,524							
D26		,867						
D25		,860					0,87	
D24		,807						
D4			,812					
D30			,750				0,795	
D2			,720					0,818
D1			,675					
DS28RS				,808				
DS13RS				,766			0,744	
DS18RS				,736				
DS19RS				,523				
D14					,845			
D27					,786		0,731	
D16					,591			
DS21RS						,824		
DS20RS						,736	0,706	
DS22RS						,619		
Explained Variance	13,42%	11,51%	11,32%	9,96%	9,57%	8,72%	Total %64,499	
KMO: 0,764 Chi Square: 2023,294 df: 253 Sig.: 0,000								

After factor analysis made on Emotional Capital Inventory, the research model was prepared as shown in Figure 1.

Figure 1. Research model



According to the research model after factor analysis, the research hypotheses were revised as followings:

- H1: Emotional capital influences individual innovativeness.
- H1a: Social awareness influences individual innovativeness.
- H1b: Self-reliance influences individual innovativeness.
- H1c: Self-awareness influences individual innovativeness.
- H1d: Relationship management influences individual innovativeness.
- H1e: Adaptability influences individual innovativeness.
- H1f: Self-management influences individual innovativeness.

### 3.2. Participants

This research was conducted on Bahçeşehir University business administration department students in Istanbul. The universe of the study consists of 250 students. Selection of the participants was random. Survey form was delivered to the students by researchers via visiting all the classes between 25<sup>th</sup> February of 2019 and 5<sup>th</sup> April of 2019. The sample size is 217 students. 113 students are female and 104 are male. Moreover, 174 students are Turkish, and 43 are non-Turkish. In terms of innovativeness level, 97 students are high innovative (above 68 points), 43 students are medium innovative (64-68 points), and 77 students are low innovative (below 64 points). Furthermore, according to innovativeness type, 22 students are innovators (above 80 points), 75 students are early adopters (69-80 points), 94 students are early majority (57-68 points), 23 students are late majority (46-56 points), and 3 students are laggards/traditionalists (below 46 points).

## 4. Results

In this section, findings about the conducted research were presented. In this respect, firstly regression analyses were conducted to test the research hypotheses. In order to test “H1: Emotional capital influences individual innovativeness.” and the sub-hypotheses of “H1a: Social awareness influences individual innovativeness.”, “H1b: Self-reliance influences individual innovativeness.”, “H1c: Self-awareness influences individual innovativeness.”, “H1d: Relationship management influences individual innovativeness.”, “H1e: Adaptability influences individual innovativeness.” and “H1f: Self-management influences individual innovativeness.”, linear regression analyses were carried out. The results can be shown in Table 2. According to the results, emotional capital (0,506) has positive and significant influence on individual innovativeness, and the model explains %25,30 of individual innovativeness. Thus, “H1: Emotional capital influences individual innovativeness.” was accepted. Moreover, in terms of the effect of

emotional capital factors on individual innovativeness, self-reliance (0,349), relationship management (0,228) and adaptability (0,170) have positive and significant effects on individual innovativeness, and the model explains %30,60 of individual innovativeness. Thus, “H1b: Self-reliance influences individual innovativeness.”, “H1d: Relationship management influences individual innovativeness.” and “H1e: Adaptability influences individual innovativeness.” were accepted. However, “H1a: Social awareness influences individual innovativeness.”, “H1c: Self-awareness influences individual innovativeness.” and “H1f: Self-management influences individual innovativeness.” were rejected.

Table 2. Regression analysis results for the effect of EC on II

Dependent: II	Beta	t-value	Sig.	Adj. R <sup>2</sup>	F-value	Sig.
Constant		8,499	0,000			
SOA	0,123	1,955	0,052			
SR	0,349	5,545	0,000			
SEA	-0,027	-0,417	0,677	30,60%	16,875	0,000
RM	0,228	3,598	0,000			
AD	0,170	2,529	0,012			
SM	0,006	0,092	0,927			
Dependent: II	Beta	t-value	Sig.	Adj. R <sup>2</sup>	F-value	Sig.
Constant		7,720	0,000	25,30%	74,021	0,000
EC	0,506	8,604	0,000			

After regression analyses, Independent Samples T Test analyses were conducted in order to measure whether or not the answers of participants for individual innovativeness, emotional capital and its dimensions differentiate according to gender and nationality of the students.

In Table 3, Independent Samples T Test results according to gender variable can be shown. As it can be seen in Table 3, male students (X=3,2821) gave higher answers than female students (X=2,9676) for self-management dimension of emotional capital (t=2,327; p=0,021).

Table 3. Independent samples t test results according to gender

	Gender	Mean	t	df	Sig.
Social Awareness	Male	3,9888	-1,840	215	,070
	Female	4,1652			
Self-Reliance	Male	3,7756	1,531	215	,127
	Female	3,5575			
Self-Awareness	Male	4,0433	-,822	215	,412
	Female	4,1283			
Relationship Management	Male	3,6683	,318	215	,751
	Female	3,6283			
Adaptability	Male	3,6090	-,328	215	,744
	Female	3,6490			
Self- Management	Male	3,2821	2,327	215	,021*
	Female	2,9676			
Emotional Capital	Male	3,7730	,153	215	,878

	Female	3,7626			
	Male	3,6841			
Individual Innovativeness	Female	3,6522	,466	215	,642

In Table 4, Independent Samples T Test results according to nationality variable can be shown. As it can be seen in Table 4, Turkish students ( $X=3,7773$ ) gave higher answers than non-Turkish students ( $X=3,1221$ ) for relationship management dimension of emotional capital ( $t=4,343$ ;  $p=0,000$ ).

Table 4. Independent samples t test results according to nationality

	Nationality	Mean	t	df	Sig.
Social Awareness	Turkish	4,1063	1,073	215	,284
	Non-Turkish	3,9767			
Self-Reliance	Turkish	3,6552	-,194	215	,847
	Non-Turkish	3,6899			
Self-Awareness	Turkish	4,0819	-,220	215	,826
	Non-Turkish	4,1105			
Relationship Management	Turkish	3,7773	4,343	215	,000*
	Non-Turkish	3,1221			
Adaptability	Turkish	3,6456	,521	215	,603
	Non-Turkish	3,5659			
Self-Management	Turkish	3,0747	-1,287	215	,199
	Non-Turkish	3,2946			
Emotional Capital	Turkish	3,7914	1,416	215	,158
	Non-Turkish	3,6714			
Individual Innovativeness	Turkish	3,6948	1,614	215	,108
	Non-Turkish	3,5570			

## 5. Conclusion

In this study, the influence of emotional capital and its dimensions on individual innovativeness was investigated. According to the results, total emotional capital has positive and significant effect on total individual innovativeness. Furthermore, self-reliance, relationship management and adaptability dimensions of emotional capital have also effects on total individual innovativeness. It means that people who trust themselves, have good and effective relations with others and can adapt all situations easily are more prone to be innovative personally. These results support previous studies about the effect of emotional intelligence on individual innovativeness in the literature [13-14-15-16-17-18-19-23-24-25]. Moreover, there was determined significant difference only for self-management dimension of emotional capital on behalf of male students in terms of gender variable. In this respect, it can be said that male students are more controlled than females. Then, there was determined significant difference only for relationship management dimension of emotional capital on behalf of Turkish students in terms of nationality variable. In this regard, it can be said that Turkish students can contact with people better than others.

There are some limitations of this research. First of all, this research was limited with the topics of emotional capital and individual innovativeness. Furthermore, the research is limited with the survey questionnaire including Emotional Capital Inventory with 30 items developed by Newman et al. (2015) and Individual Innovativeness Scale developed by Hurt et al. (1977). Moreover, this research has time limitation, because the researchers have to finish the research in a certain time period, and also the research was conducted between 25th February of 2019 and 5th

April of 2019.

For further studies, researchers can conduct similar studies in different universities, faculties and departments. Moreover, there can be conducted similar researches in different cities, since this study was made in Istanbul. Furthermore, similar researches can be made on lots of sectors especially in service industry such as education, airline, information technologies and etc.

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