

Mediating Role of Emotional Self-Efficacy Between Emotional Intelligence and Creativity: Empirical Study on University Undergraduates

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Today's world requires a professional working life in which there are individuals equipped with different skills, and using composition of those skills. Thus, person-job fit, difficulties individual faces in the job and the overall process during their career paths have become important phenomena. In this process, some of the factors make positive contributions to people' both personal and professional life. In this study, among those factors, Emotional Intelligence, Creativity from both potential and practice perspective and Emotional Self Efficacy have been investigated. The main objective of this study is to unravel the stated untapped pathway between Emotional Intelligence and Creativity in educational context-in University subject domain. In this respect, the mediating role of Emotional Self Efficacy in explaining Potential and Practiced Creativity has been mentioned. Data for this study was collected from a sample of 265 students receiving education both from state and private universities located in Istanbul, Turkey. Snowball sampling was applied in order to reach as much students as possible. The data were analyzed by using the Statistical Package for the Social Sciences (SPSS) 22.0 software. Firstly, Factor and Reliability Analyses of all measurement instruments were conducted and their factor structure was revised based on the results. Then hierarchical regression analysis was done in order to test the mediating effects.

Keywords

Emotional Intelligence, Creative Potential, Practiced Creativity, Emotional Self-Efficacy

The results show that; Emotional Self Efficacy mediates the effects of Adaptability on only Creative Potential for students. In other words, individuals who; have problem solving ability, are flexible and realistic can have a potential for being creative. When they have a belief in their capability of perceiving emotions in self and the others, using emotions to facilitate thought, understanding emotions and emotional knowledge in the self and the others and regulating emotions in the self and the others (Mayer, Salovey and Caruso, 2004 cf. Kirk, Schutte and Hine, 2008) effect of adaptable abilities lost its effect in explaining their creative potential.

1. Introduction

Scholarly focus on or commercial and academic expansion of Emotional Intelligence comes from the fact that individuals who are regarded as intelligent (high IQ level) ones could not succeed in every aspects of life as ever expected. (Acar, 2001; Dulewicz and Higgs, 2000). Thus, considering only IQ could not be a good indicator of real life outcomes. In literature,

Emotional Intelligence has become one of the major evaluation tools for individual's workplace outcomes including successes and failures.

Furthermore, Creativity which is considered as the production of novel and useful ideas, products or procedures in any domain (Amabile, Conti, Coon, Lazenby and Herron, 1996; Carmeli, McKay and Kaufman, 2013) has also been a significant factor for individuals, because it is feeding mechanism that leads to innovation. But especially the main emphasis of this study is creative potential and practiced creativity for evaluating creative individuals.

Another phenomenon, Emotional Self Efficacy (ESE), has been included in this research and the main concern is to reveal the path between Emotional Intelligence and Creativity, in other words, where the Emotional Intelligence and ESE can intersect and affect creativity is under consideration. All of them are evaluated in an educational domain: *Universities*.

This study is organized as follows: First part deals with the operational definition and theoretical approaches to Emotional Intelligence, Creativity and Emotional Self Efficacy. Based on these, proposed model of the study is explained. The other part explains the methodological orientation of the research. Lastly, practical and theoretical implications are discussed in accordance with the findings.

2. Literature Review

2.1. "Emotional Intelligence (EI/EQ)": Definition and Theoretical Approaches

Scholarly focus and commercial expansion of Emotional Intelligence comes from the fact that individuals who are regarded as intelligent (high IQ level) ones, could not succeed in every aspects of life as ever expected (Acar, 2001; Dulewicz and Higgs, 2000). Thus, it is believed that considering only IQ could not be a good indicator of real life outcomes. In literature, Emotional Intelligence has become one of the major evaluation tools for individual's workplace outcomes including successes and failures. In this part, firstly nature of Emotional Intelligence and fundamental theoretical approaches is explained.

Nature of Emotional Intelligence: Operational Definition

The first researchers to use the concept of Emotional Intelligence (hereafter EI) were American psychologists Salovey and Mayer (Hahn, Choi, and Lee, 2013). They defined Emotional Intelligence as the subset of *Social Intelligence* which has been also defined as the ability to understand and manage people. In their definition, EI is explained as the ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions (Salovey and Mayer, 1990; Mayer and Salovey, 1993). Here, they firstly suggested appraising and expressing emotions is a part of the EI. Furthermore, they believe that people need to perceive emotions not only in themselves, but also in those around them, because this could enable individuals to adapt to social behaviors and perceived positively by others. They also included regulation of emotion in self and others and the utilization of emotional content in problem solving (Salovey and Mayer, 1990; Mayer and Salovey, 1993)

Goleman, later introduced the term "emotional intelligence" in The Times in 1995, and since then the term has received a great amount of attention from researchers around the world (Hahn, Choi, and Lee, 2013). Popularity of the term "EI" comes from the most famous book

written by Daniel Goleman, and then it has been defined so many times.

Mayer, Salovey and Caruso (2000) has defined EI firstly as a cultural trend (*zeitgeist*), group of personality traits and set of abilities having to do with processing emotional information. They have used “*zeitgeist*” implying integration in the war between emotion and rationality throughout human history. Historically, ‘emotion’ and ‘intelligence’ were viewed as being opposite to one another (Lloyd, 1979). The theory of emotional intelligence suggested the opposite: emotions make cognitive processes adaptive and individuals can think rationally about emotions (Brackett, Rivers, and Salovey, 2011). In this sense, it refers an emotionally intelligent society that understands how to integrate reason and emotion (Mayer et al 2000).

Secondly, emotional intelligence has been defined by referring Daniel Goleman’s five parts: Knowing emotions, managing emotions, motivating oneself, recognizing emotions in others and handling relationships (Mayer et al., 2000). Also, Goleman’s another book focused on the workplace, these five parts have been divided into twenty-five different emotional competencies (Mayer et al, 2000). As they stated, another definition made by Bar-On: *EI is an array of non cognitive capabilities, competencies and skills that influence one’s ability to succeed in coping with environmental demands and pressures* (cf. Bar-On,1997 in Mayer et al., 2000). The key factors involved in this model include **intrapersonal capacity** (the ability to be aware and understand oneself, one’s emotions and to express one’s feelings and ideas) which further divided into emotional self awareness, assertiveness, self-regard, self-actualization and independence, **interpersonal skills** (the ability to be aware of, understand and to appreciate others’ feelings as well as to establish and maintain mutually satisfying and responsible relationships with others) which is divided into empathy, interpersonal relationship and social responsibility, **adaptability** (the ability to verify one’s feelings with objective external cues and accurately size up the immediate situation, exibly to alter one’s feelings and thoughts with changing situations, and to solve personal and interpersonal problems) which is divided into problem solving, reality testing and flexibility, **stress management** (the ability to cope with stress and to control strong emotions) which is divided into stress tolerance and impulse control, and **motivational and general mood factors** (the ability to be optimistic, to enjoy oneself and others, and to feel and express positive feelings) which is lastly divided into happiness and optimism (Bar-On et al., 2000; Mayer et al., 2000).

However, Mayer and his colleagues see such groupings as quite different part of personality and they argue that it is highly improbable that any person could meet both intrapersonal and social/interpersonal skills at any time that has been stated in Goleman’s twenty-five criteria (Mayer et al., 2000). Instead, they suggested that EI is composed of mental abilities, skills or capacities. Furthermore, they discussed those researchers who use “Emotional Intelligence” to describe multiple aspects of personality often characterize mental qualities as abilities or capacities (Mayer et al., 2000).

Although EI is regarded as an important tool in organizational science, many questions about its construct, theory and measurement has been discussed, so answers remain dubious on such issues not only in organizational context but also in the other fields (Joseph and Newman, 2010).

Theoretical Approaches: Ability vs Mixed Models

Theoretical approaches to EI, using different models can be divided according to whether they focus on specific abilities. From mostly used models, *ability model* considers EI as "the ability to carry out accurate reasoning about emotions and the ability to use emotions and emotional knowledge to enhance thought". Even, among this conceptualization, it is possible to divide the model into two: specific-ability approaches and integrative model approaches (Mayer et al., 2008). According to Mayer et al.'s classification, specific -ability approaches focus on a particular skill(s) that can be considered fundamental to EI.

In a general sense the ability-based models explain EI as a construct that can be broken down into a set of four branches or competencies: 1. Perceiving emotions accurately, appraising and expressing emotions; 2. Using emotions to facilitate thought, 3. Understanding emotions and emotional knowledge and 4. Managing emotions in a way that enhances personal growth and social relations in other sense promote emotional and intellectual growth (Mayer, Salovey, Caruso and Sitarenios, 2001; Carmeli, McKay and Kaufman, 2013). As stated by Mayer et al. (2008), integrative models of EI refers joining several specific abilities mentioned in the four branch model to obtain an overall sense of EI. However, the main difference lies in skills growing in one area (e.g., perceiving emotions), so will grow skills in other areas, such as understanding emotions and being able to regulate them.

Despite their frequent usage, in literature some of authors prefer to focus on mixed models that do not classify EI as intelligence but as a combination of intellect, personality and affect. Petrides and Furnham (2001) proposed two labels, firstly emotional self-efficacy for trait view and secondly cognitive-emotional ability for ability view in order to avoid semantic inconsistencies. Another one that has used in this study has been developed by Dr. Reuven Bar-On. It includes intrapersonal capacity, interpersonal skills, adaptability, stress management strategies and motivational and general mood factors (Bar-On, Brown, Kirkcaldy and Thome,2000).

Especially mixed models, include not only emotion and intelligence, but also as Bar-On and Goleman stated, motivation, non-ability dispositions and traits, and global personal and social functioning. Although these theoretical discussions have merits for delineation and understanding of EI, this study's main concern is not just discussing such differences. Although there are some inconsistencies in operational definitions from some aspects, each view has valuable implications for practice and theory. However, this study explicitly linked to Bar-On's definition of EI. It implies as "an array of non-cognitive capabilities, competencies, and skills that influence one's ability to succeed in coping with environmental demands and pressures". In this sense, rather recognition and control of personal emotion, EI is studied as an umbrella term (grab bag) for a broad array of constructs that could be loosely connected (Bar-On 1997 cf. Joseph and Newman, 2010).

2.2. Creativity: Creative Potential and Practiced Creativity

Another construct under consideration is Creativity from potential and practice perspective. Although the examination of the underlying causes and the mechanisms of creativity cause conceptual diversity (Ruiz,Torrano,Gonzalez,Batey and Petrides, 2011), mostly

agreed upon definition of it is “the generation of novel (i.e., original, unexpected) and appropriate (i.e., useful, adaptive) ideas for products, services, processes and procedures by the complex mosaic of individuals and groups in a specific organizational context (Amabile, Conti, Coon, Lazenby and Herron, 1996; Amabile, 1997; Carmeli, McKay and Kaufman, 2013; McLean, 2005; , Martins and Terblanche, 2003; Woodman, Sawyer and Griffin, 1993). The term “novel” indicates the difference from what’s been done before and “appropriate” means suitability to the problem or the opportunity presented (Amabile, 1997). Yet, creativity needs to satisfy another condition that these ideas for products, services, procedures and processes are relevant for, or useful to an organization (Oldham and Cummings, 1996).

Rather than only as a product, creativity could be regarded also as the process of idea generation, problem solving, and the implementation of an actual idea or solution within a social context (Carmeli, McKay and Kaufman, 2013). Thus creativity is a multilateral phenomenon resulting from cognitive, motivational/dispositional and environmental/social factors and their interaction. This means that creativity more likely occur when an individual has certain characteristics or innate skills and abilities, has domain specific knowledge embedded within social networks, is intrinsically motivated and perceives environmental factors as supporting (DiLiello and Houghton, 2008).

Creativity is used in large bodies of research: as socially recognized achievement in which there are novel products to which one can point to as evidence, such as inventions, theories, buildings, published writing, paintings and sculptures and films; laws; institutions; medical and surgical treatments, and so on; and as an ability manifested by performance in critical trials, such as tests, contests, etc, in which one individual can be compared with another on a precisely defined scale (Barron and Harrington, 1981).

Based on this brief literature review, creativity has been examined from a potential and practiced perspective in this study. Creative potential may be defined as the creative capacity, skills and abilities that the individual possesses. In contrast, as the utilization of creative skills and abilities, practised creativity is different from creative performance, which is measured externally by products or achievements that can be assessed or observed (Hinton, 1968; 1970; Amabile, 1996 cf. DiLiello and Houghton, 2008)

2.3. Emotional Intelligence and Creativity in the Context of Efficacy

Proposed Relationship between EI and Creativity

Furthermore, while research attention had directed to the influence of EI on individual behaviors and performance, much less work has been done to explore the links between EI and creativity (Joseph and Newman, 2010; O’Boyle et al., 2011). There are even several conducted studies that focus on the antecedents of creativity, intelligence, cognitive style, personality with contextual factors such as leadership, organizational support, the creative atmosphere, rewards (Hahn, Choi and Lee, 2013), research suggests that relationship between EI and creativity is more complex (Carmeli, McKay and Kaufman, 2013).

In 1983, Amabile discussed the relationship between intelligence and creativity in the Componential Theory of Creativity. This theory suggests that intelligence could be regarded as a

component of creativity, even if it is not sufficient factor for creativity. Thus, there is a need to reveal the pathway between EI and Creativity.

Proposed Relationship between EI, Self- Efficacy and Creativity:

Self-efficacy for emotional functioning may be a cornerstone of emotional competence. Self-Efficacy refers an individual's perception of what he or she can do rather than what he or she does. Belief in one's personal efficacy constitutes a key factor of human achievement, attitude and performance and is a crucial element within social cognitive theory (Bandura, 1997 ; Kirk, Schutte and Hine, 2008)

According to Social Cognitive Theory, individuals act according to how they interpret-organizational- realities, and this interpretive activity is influenced by their ability to read and understand their thoughts, feelings and behaviors via self-awareness, regulation and control. Social Cognitive Theory is somewhat similar to the main concern of Emotional Intelligence studies by emphasizing self-awareness, self regulation, self control as key factors leading to the development and actualization of self-efficacy (Gundlach, Martinko and Douglas,2003). From this assumption, it is argued that work on self-efficacy and emotional intelligence intersect. Mainly, emotional intelligence can help people generate the causal attributions that are least damaging to their self-efficacy beliefs through regulating emotions these attributions might produce (Gundlach, Martinko and Douglas,2003).

In this context, Petrides and Furnham (2003) and Petrides, Sangareasu, Furnham, and Fredrickson (2006) suggested that trait emotional intelligence can be named as ' emotional-self-efficacy'. However, Kirke, Schutte and Hine find this assumption as (equating trait and emotional intelligence) an overgeneralization. They mainly argued that self-perceptions related to emotional functioning include emotional self-efficacy, but that there are other aspects of self-perception and other dispositions not encompassed by emotional self-efficacy. Thus, emotional self-efficacy may be an aspect of trait emotional intelligence, but it is not identical what Petrides and Furnham (2003) described as trait emotional intelligence (Kirk, Schutte and Hine, 2008).

They have also supported their arguments by research findings. Results indicated that trait emotional intelligence was strongly related to emotional self-efficacy. Although emotional self-efficacy could be regarded as a type of emotional intelligence in its own right, somewhat distinct and having separate utility from trait emotional intelligence and ability emotional intelligence could be gained (Kirk, Schutte and Hine, 2008).

Besides these, Reiter-Palmon, Robinson-Morrall, Kaufman, and Santo (2012) also found that self reported creativity is strongly related to creative self-efficacy. Here, the main concern is the individual's met cognition that, some people low in creative met cognition may believe that they are very creative yet not demonstrate creative proficiency (Carmeli, McKay and Kaufman,2013).

Based on these arguments, proposed research model in this study is presented in Figure 1.

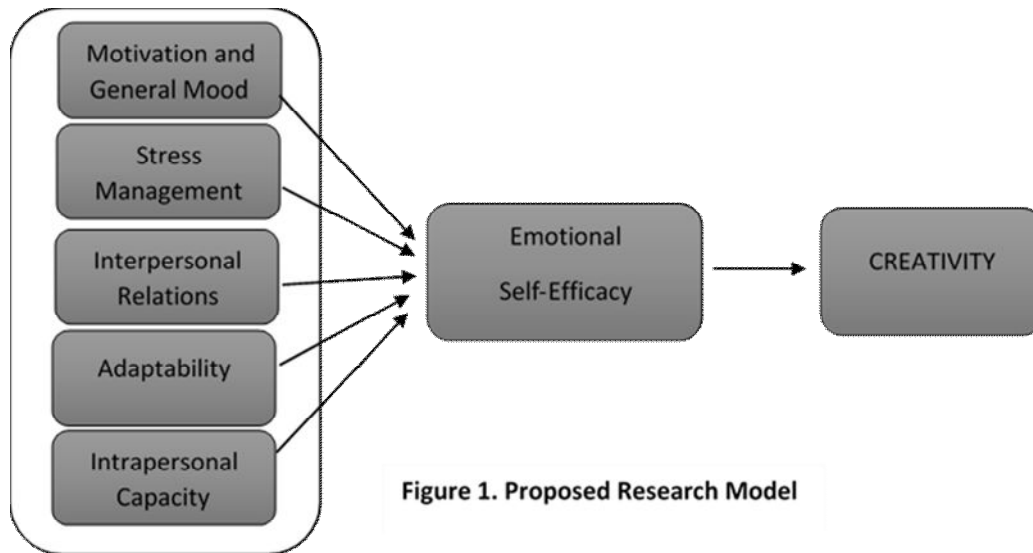


Figure 1. Proposed Research Model

3. Methodology

3.1. Research Objectives

The main objective of this study is to unravel the stated untapped relation or pathway between Emotional Intelligence and Creativity in University subject domain. In this respect, mediating role of Emotional Self Efficacy in explaining Potential and Practiced Creativity has been mentioned.

Main hypothesis developed in this study is that “*Emotional Self Efficacy has a mediating role between Emotional Intelligence and Individual Potential and Practiced Creativity*”.

3.2. Research Setting and Participants

Data for this study was collected from 265 students of both state and private universities located in Istanbul, Turkey. Snowball sampling was used in order to reach as much students as possible. The main aim of choosing students is to discuss the effect of Emotional Intelligence’s possible inclusion in curriculums on students both educational and personal lives.

3.3. Measurement Instruments

Survey method has been chosen to collect data. Scales used have been constructed after a deep literature review and have been adapted to the Turkish culture by using the method of translation and back translation as suggested in the literature. Emotional Intelligence (EI/EQ) is measured through using the scale originally developed by Dr. Reuven Bar-On. However, in this study, its Turkish version including 88 items adapted from Fusun Tekin Acar (2001), is used. This instrument consists of five composite scales measuring level of Intra-Personal Capacity, Interpersonal Relations, Adaptability, Stress Management and Motivation and General Mood. Creative Potential and Practiced Creativity scale used in this study, was developed by Trudy C. DiLiello and Jeffery D. Houghton (2008). For measuring Emotional Self-Efficacy, scale developed by Kirk, Schutte and Hine (2008) was used. Participants were asked to indicate their degree of agreement with the statements on a six-point scale ranging from “strongly disagree” =1 to “strongly agree” = 6.

4. Results

4.1. Data Analysis

4.1.1. Exploratory Principal Component Analyses

The data was analyzed using the Statistical Package for the Social Sciences (SPSS) 22.0 software. Firstly, Factor and Reliability Analysis of all measurement instruments was conducted and their factor structure was revised based on the results. Due to its composite structure, separate Factor and Reliability analyses were run for the sub dimensions of EI scale. Its five dimensions of Motivation and General Mood, Stress Management, Interpersonal Relations, Adaptability and Intra-Personal Capacity and their revised factor structure are shown respectively in the Tables below.

As shown in Table 1. Motivation and General Mood has three factors in contrast with the stated two factor structure in literature of "Optimism" and "Happiness". Respectively Cronbach's Alpha Levels of the scale are as follows: $\alpha = .689$; $\alpha = .695$, $\alpha = .693$.

Motivation and General Mood	Factor Loading	Cronbach's Alpha	Number of Items
Happiness		.689	4
I feel frequently bad. (RC)	.785		
Before leading in something, generally I have a feeling that I will be unsuccessful. (RC)	.680		
I do not enjoy life. (RC)	.633		
For me, smiling is difficult. (RC)	.577		
Optimism		.695	4
When things are getting tough, I do not lose my motivation.	.702		
I believe that I can overcome very difficult situations.	.701		
Generally, I expect the best.	.634		
I am satisfied with my life.	.531		
Spirited		.693	2
I am a cheerful person.	.799		
Being with me is enjoyable.	.779		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.			.810
Bartlett's Test of Sphericity			
Approx Chi-Square			661,273
df			45
Sig.			.000
Overall Reliability Statistics: Cronbach's Alpha			.800

Table 1: Factor and Reliability Analysis of Emotional Intelligence Scale –Motivation and General Mood

Table 2. also indicates Factor and Reliability Analysis of Emotional Intelligence Scale-Stress Management with its three factor structure in contrast with the stated two factors in literature of "Impulse Control" and "Stress Resistance". Respectively Cronbach's Alpha Levels of the scale are as follows: $\alpha = .636$; $\alpha = .603$, $\alpha = .609$.

Stress Management	Factor Loading	Cronbach's Alpha	Number of Items
Impulse Management			
I have difficulty in controlling my anger. (RC)	.762	.636	4
I am a grumpy person. (RC)	.696		
During the discussion(s), my friends tell me to lower my voice. (RC)	.663		
I am an impatient person.	.604		
Stress Resistance			
I know how to deal with troublesome situations.	.839	.603	3
I know how to keep my temper under difficult situations/conditions.	.748		
I can cope with stress without becoming very angry.	.575		
Stress tolerance			
I can't put up with ever so much stress. (RC)	.841	.609	2
It is difficult for me to face sad events. (RC)	.773		
<i>Kaiser-Meyer-Olkin Measure of Sampling Adequacy.</i>			.707
<i>Bartlett's Test of Sphericity</i>			
<i>Approx Chi-Square</i>			341,409
<i>df</i>			36
<i>Sig.</i>			.000
<i>Overall Reliability Statistics: Cronbach's Alpha</i>			.671

Table 2: Factor and Reliability Analysis of Emotional Intelligence Scale-Stress Management

Table 3. explains the Factor and Reliability Analysis of Emotional Intelligence Scale-Interpersonal Relations with its three factor structure of "Social Responsibility", "Interpersonal Relations" and "Empathy" similar to what has been found in the literature. Respectively, Cronbach's Alpha Levels of the scale is as follows: $\alpha = .804$; $\alpha = .782$, $\alpha = .693$.

Interpersonal Relations	Factor Loading	Cronbach's Alpha	Number of Items
Social Responsibility			
I respect the others (people).	.780	.804	5
I can help a crying child to find his/her dad and mom even if I have to be somewhere else.	.742		
My friends easily share their private issues with me.	.685		
I care about what happens to the others.	.634		
I am happy with helping another person(s).	.613		
Interpersonal Relations			
I easily make friends.	.792	.782	4
People think that I am a social person.	.784		
I can form good relationship with others (people).	.731		
Forming good relationship is important both for my friends and me.	.599		
Empathy			
I do not get on well with others. (RC)	.779	.693	3
According to some, it is difficult to trust me. (RC)	.746		
I could not realize the others suffering (from something.)	.693		
<i>Kaiser-Meyer-Olkin Measure of Sampling Adequacy.</i>			.863
<i>Bartlett's Test of Sphericity</i>			
<i>Approx Chi-Square</i>			1108,127
<i>df</i>			66
<i>Sig.</i>			.000
<i>Overall Reliability Statistics: Cronbach's Alpha</i>			.857

Table 3: Factor and Reliability Analysis of Emotional Intelligence Scale-Interpersonal Skills

Table 4. also shows only one factor for Emotional Intelligence Scale- Adaptability ($\alpha=.690$) in contrast with the literature in which three sub dimensions have been stated as “Flexibility”, “Realism” and “Problem Solving”.

Adaptability	Factor Loading	Cronbach's Alpha	Number of Items
<i>Problem Solving</i>		.690	4
When I face a problem, I think twice.	.774		
When I face a difficulty, I want to collect as much as information about the issue.	.744		
While I am solving problem(s), I analyze all the possibilities, and then I try to decide the best.	.740		
My skills in managing difficulties are getting better.	.620		
<i>Kaiser-Meyer-Olkin Measure of Sampling Adequacy.</i>			.727
<i>Bartlett's Test of Sphericity</i>			
<i>Approx Chi-Square</i>			170.104
<i>df</i>			6
<i>Sig.</i>			.000
<i>Overall Reliability Statistics: Cronbach's Alpha</i>			.857

Table 4: Factor and Reliability Analysis of Emotional Intelligence Scale-Adaptability

Intrapersonal Capacity	Factor Loading	Cronbach's Alpha	Number of Items
<i>Self Actualization</i>		.790	7
I try all my best to learn something appealing to me.	.742		
I feel good when I evaluate both my positive and negative sides.	.695		
I try all my best to make my life more meaningful.	.671		
When I feel bad, I know what upsets me.	.628		
I can tell someone what I think even if I disagree with him.	.540		
I can tell the other(s) when I get angry.	.532		
I like doing things that I am interested in.	.530		
<i>Stability</i>		.736	5
I could not decide on my own. (RC)	.722		
I need someone else much more they need me. (RC)	.712		
I know what I feel.	.658		
I am satisfied my own personality.	.645		
I do not know what I am exactly good at. (RC)	.592		
<i>Emotional Sense of Self</i>		.613	3
I can easily reveal my on feelings.	.646		
I cannot easily share my deep feelings with someone else. (RC)	.743		
It is difficult to define my own feelings.(RC)	.686		
<i>Kaiser-Meyer-Olkin Measure of Sampling Adequacy.</i>			.829
<i>Bartlett's Test of Sphericity</i>			
<i>Approx Chi-Square</i>			1,079.585
<i>df</i>			105
<i>Sig.</i>			.000
<i>Overall Reliability Statistics: Cronbach's Alpha</i>			.821

Table 5: Factor and Reliability Analysis of Emotional Intelligence Scale -Intra Personal Capacity

Table 5. explains the factor structure and reliability of Emotional Intelligence Scale-Intra Personal Capacity with its three dimensions in contrast with the stated five dimensions of “Independency”, “Stability”, “Self-Respect”, “Self-Actualization” and “Emotional Sense of Self”. Respectively, Cronbach's Alpha Levels of the scale is as follows: $\alpha=.790$; $\alpha=.736$, $\alpha=.613$.

Creativity	Factor Loading	Cronbach's Alpha	Number of Items
<i>Creative Potential</i>		.828	4
I have knack for further developing the ideas to others.	.710		
I feel that I am good at generating novel ideas.	.738		
I have confidence in my ability to solve problems creatively.	.810		
I am good at finding creative ways to solve problems.	.828		
<i>Kaiser-Meyer-Olkin Measure of Sampling Adequacy.</i>			.828
<i>Bartlett's Test of Sphericity</i>			
<i>Approx Chi-Square</i>			670.254
<i>df</i>			6
<i>Sig.</i>			.000
<i>Overall Reliability Statistics: Cronbach's Alpha</i>			.901

Table 6: Factor and Reliability Analysis of Creativity Scale

Originally, creativity has been divided into two factors as Creativity Potential and Practiced Creativity. However, as shown in Table 6. above, in this study only Creative Potential has found reliable ($\alpha=.828$). Lastly, Table 7 shows Reliability and Factor Analysis of Emotional Self-Efficacy Scale. Scale was revised with four factor structures as "Regulating", "Facilitating", "Understanding", "Perceiving". Respectively Cronbach's Alpha Levels is as follows: $\alpha=.869$; $\alpha=.818$; $\alpha=.794$.

Emotional Self Efficacy Scale	Factor Loading	Cronbach's Alpha	Number of Items
<i>Regulating</i>		.869	6
Understand what causes your emotions to change	.792		
Correctly identify your own positive emotions	.672		
Know what causes you to feel a negative emotion	.766		
Figure out what causes you to feel differing emotions	.576		
Correctly identify your own negative emotions	.620		
Know what causes you to feel a positive emotion	.564		
<i>Facilitating</i>		.796	4
Change your negative emotion to a positive emotion	.756		
Create a positive emotion when feeling a negative emotion	.835		
Use positive emotions to generate novel solutions to old problems	.762		
Help another person change a negative emotion to a positive emotion	.515		
<i>Understanding</i>		.818	4
Realize what causes another person to feel a negative emotion	.773		
Realize what causes another person to feel a positive emotion	.688		
Figure out what causes another person's differing emotions	.793		
Understand what causes another person's emotions to change	.599		
<i>Perceiving</i>		.794	4
Use positive emotions to generate good ideas	.571		
Recognize what emotion is being communicated through your facial expression	.761		
Notice the emotion your body language is portraying	.819		
Notice the emotion another person's body language is portraying	.643		
<i>Kaiser-Meyer-Olkin Measure of Sampling Adequacy.</i>			.895
<i>Bartlett's Test of Sphericity</i>			
<i>Approx Chi-Square</i>			2,460.222
<i>df</i>			153
<i>Sig.</i>			.000
<i>Overall Reliability Statistics: Cronbach's Alpha</i>			.920

Table 7: Factor Analysis and Reliability of Emotional Self-Efficacy Scale

4.1.2. Multiple Hierarchical Analyses

According to Baron and Kenny (1986) there are three conditions that be need to be meet in order to make a mediation analysis: Firstly, the independent variable must have a significant effect on mediating variable, secondly the independent variable must have a significant effect on dependent variable, lastly, mediating variable must have a significant effect on dependent variable. Under these conditions, it is possible to analyze mediating effects. Mediating effects could be diagnosed if the effect of the independent variable on dependent variable decreases when the third (mediating) variable is included in the analysis. However, perfect mediation occurs when the independent variable loses its significant effect when the mediating variable included in the analysis.

In this vein, Hierarchical Regression Analyses were conducted in two sequential steps after controlling whether there is a significant correlation between variables. On the first step, sub dimensions of EI; Motivation and General Mood ($\beta=.025$, $p=.703$), Stress Management ($\beta=. -010$, $p=.867$), Interpersonal Relations ($\beta=.131$, $p=.051$), Adaptability ($\beta=.370$, $p<.05$) and Intra-Personal Capacity ($\beta=.037$, $p=.584$) were regressed firstly on Creative Potential. Then, these dimensions of Emotional Intelligence were regressed on Emotional Self Efficacy. The results for Self Efficacy Factor (1) are as following: Motivation and General Mood ($\beta=.079$, $p=.211$), Stress Management ($\beta=-.003$, $p=.952$), Interpersonal Relations ($\beta=.218$, $p<.05$), Adaptability ($\beta=.309$, $p<.05$) and Intra-Personal Capacity ($\beta=.057$, $p=.377$). For the Self Efficacy Factor (2), Motivation and General Mood ($\beta=.023$, $p=.680$), Stress Management ($\beta=.30$, $p=.553$), Interpersonal Relations ($\beta=.151$, $p<.05$), Adaptability ($\beta=.444$, $p<.05$) and Intra-Personal Capacity ($\beta=.156$, $p<.05$) are found.

For the third one, Self Efficacy Factor (3), results are: Motivation and General Mood ($\beta=-.040$, $p=.536$), Stress Management ($\beta=.069$, $p=.241$), Interpersonal Relations ($\beta=.287$, $p<.05$), Adaptability ($\beta=.247$, $p<.05$) and Intra-Personal Capacity ($\beta=.055$, $p=.408$). Lastly, for the Self Efficacy Factor (4), Motivation and General Mood ($\beta=-.027$, $p=.684$), Stress Management ($\beta=.073$, $p=.219$), Interpersonal Relations ($\beta=.157$, $p=.021$), Adaptability ($\beta=.327$, $p<.05$) and Intra-Personal Capacity ($\beta=.065$, $p=.337$). Additionally, Emotional Self Efficacy Factors were regressed on Creative Potential: Regulating ($\beta=-.032$, $p=.691$), Facilitating ($\beta=.472$, $p<.05$), Understanding ($\beta=-.054$, $p=.455$) and Perceiving ($\beta=.188$, $p<.05$).

Coefficients ^a						
Model(s)		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error			
Model 1	(Constant)	1.880	.323	.463	5.821	.000
	Adaptability	.566	.067		8.466	.000
Model 2	(Constant)	1.060	.324		3.275	.001
	Adaptability	.344	.070	.281	4.886	.000
	Facilitating	.429	.064	.383	6.661	.000
Model 1: R= .463, R ² =.214 F (1,263)=71.682 p<.05						
Model 2: R= .573, R ² =.328 F (2,262)=63.935 p<.05						
a. Dependent Variable: Creative Potential						

Table 8: Multiple Regression Analysis I

As shown Table 8. above, Model 1 explains the .214 variance in Creative Potential, however the Model 2 explains the .328 variance in Creative Potential. Adaptability's affect on Creative Potential has decreased from $\beta = .463$ to $\beta = .281$ even, but its significant effect continues ($p < .05$).

Model(s)		Coefficients ^a				
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
Model 1	(Constant)	1.880	.323		5.821	.000
	Adaptability	.566	.067	.463	8.466	.000
Model 2	(Constant)	1.111	.389		2.855	.005
	Adaptability	.460	.073	.376	6.327	.000
	Perceiving	.262	.077	.202	3.405	.001
Model 1: R = .463, R ² = .214 F (1,263) = 71.682 p < .05						
Model 2: R = .497, R ² = .242 F (2,262) = 43.080 p < .05						
<i>a. Dependent Variable: Creative Potential</i>						

Table 9: Multiple Regression Analysis II

Table 9. indicates the results of Second Regression Analysis as Model 1 explains the .214 variance in Creative Potential, however Model 2 explains the .242 variance of Creative Potential. Adaptability on Creative Potential has decreased from $\beta = .463$ to $\beta = .376$ even, its significant effect continues ($p < .05$).

5. Discussions and Conclusion

The main aim of this study is to reveal the effect of Emotional Self Efficacy on the relationship between EI and Creativity from the potential and practice perspective. Based on the mix model of EI assumptions, this study was built on the five composite dimensions of EI including intrapersonal capacity, interpersonal skills, adaptability, stress management strategies and motivation and general mood (Bar-On, Brown, Kirkcaldy and Thome, 2000). According to the findings, from the Emotional Self Efficacy dimensions, Facilitating and Regulating have mediating effects between Adaptability and Creative Potential. This means that if a person has the ability to verify his feelings with objective external cues and to adapt emerging conditions by altering his feelings and thoughts and solving both personal and interpersonal problems, it is more likely to have creative potential. Though, if there is self-confidence in both using emotions to facilitate thought and regulating those emotions in the self and others, the effect on previous abilities coming from Adaptability, lose its power to a certain extent. Thus, our latent hypothesis is partially supported, so full mediation has not occurred in this study.

Based on the results, it is again ascertained that Emotional Intelligence and Emotional Self Efficacy are not overlapping constructs, they are somewhat distinct and have separate utility from trait emotional intelligence and ability emotional intelligence (Kirk, Schutte and Hine, 2008).

Another interesting finding is that although Creativity was analyzed from both potential and practice perspective, only potentiality has given some meaningful results. This could derive

from the fact that this study was conducted in university setting, thus students could not find any opportunity in practicing their creativity.

As undergraduate students are gaining qualifications, knowledge and skills to prepare them for future lives in the world of work, they also need to be equipped with knowledge and skills in emotional functioning. If they have confidence in such skills, they can easily reflect those skills on the workplace, they will be more successful and will be satisfied with their lives (Dacre, Pool & Sewell, 2007). In this capacity, higher education system could be designed so that students can also learn how to acquire and adopt such skills. Thus, lecturers should have a responsibility not only limited to teaching or academic counseling, but also encompassing a coaching role penetrating in every aspect of student's life.

Besides this study's contributions, unfortunately, we used self-report measures of EI that we could not assess true intelligence and it is highly likely that respondents can provide socially desirable responses. Besides self-report measure, it is possible to use another supportive measure in order to avoid biased answers. This study can be repeated in other organizational settings. As an important antecedent and mostly studied in creativity research, contextual factors in addition to personal psychological factors can be used and tested with different models. As another research venue for future could be comparing both female and male student's level of those skills and especially role of education for developing countries.

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