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## The Interplay among Emotions, Creativity and Emotional Intelligence: A Case of Iranian EFL Teachers

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### ABSTRACT

It goes without saying that educators strive for the ideal of developing higher order thinking skills like critical, reflective, logical, metacognitive, and creative thinking among their learners. Wundt (1916) considered lower order skills like Emotions as the base for the creation of these skills. Research on emotions and Emotional Intelligence has significantly increased over the past two decades with many fields contributing including psychology, neuroscience, sociology and endocrinology. The current study tried to uncover the interplay among Creativity, Emotions and Emotional Intelligence. To this end, the researchers studied the relationship of the constructs among 160 EFL learners. The results of the study showed no relationship between EQ and creativity, however, EQ components positively and significantly influence positive emotions and the reverse is true for negative emotions; EQ influences negative emotions, negatively and significantly. The findings of the current study could help further the knowledge on the interplay among Emotional issues and Creativity.

**Keywords:** *Creativity, Emotional Intelligence, Emotions, EQ Components, EFL Teachers*

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### 1. Introduction

The method era and too much almost hopeless engagement in finding a one-size-fits-all approach and/or method was one of the faults in second language acquisition (SLA); however, this fault must have been committed in order to prepare and evolve language educators to enter the post-method era. One of the fruits of this post-method era -as Kumaravadivelu (2001) believes- is a greater awareness of issues such as teacher cognition, his sense of plausibility and subjectivity; or the position of individual differences in current models of educational psychology has been turned to a major focus of carrying out SLA research. This decentralization of theorizing and making a class, a teacher and students the major focus of studies paved the way for delving into cognitive and affective internal factors of individual teachers and students. Fahim and Zaker (2014) asserted that current pedagogical concerns appear to highlight the major role of individual differences in language learning. Among these individual factors, according to GU (2003), intelligence is often thought of as the most significant

predictor of language learning success. Two important affective factors of creativity and emotions are closely intertwined and they are both related to emotional intelligence. Leafing through literature reveals a considerable amount of research based on the influence of certain emotional states on creative performance (Ho and Siu 2011; Van Kleef et al. 2010). For instance, De Dreu et al. (2008) have found a link between positive emotions and divergent thinking in the right hemisphere of the brain. The positive emotions often provide a safe and problem free situation for individuals to feel unconstrained, to take risks, and to explore novel pathways and to rely on heuristic process styles. In contrast, negative emotions by restricting peoples' attention (Fredrickson, 2004), support convergent thinking and facilitate left hemispherical, secondary process cognition (De Dreu et al., 2008). That is negative emotions make the cultivation of creativity more difficult.

In teachers' lives, unexpected variables may exist that prevents them from striving for creativity and expecting failure or unpleasant feelings. In such situations, if

teachers do not have a certain level of emotional intelligence, achievement of creativity cultivation would be very difficult (Siu & Wong, 2014). Thus, teachers need to handle their emotions in order to be able to cultivate creativity; otherwise, gaps in emotional intelligence skills affect their psychological wellbeing as well as their teaching. Based on the existing literature, it was hypothesized that there can be interplay among EQ, Emotions and Creativity and thus the following research questions and hypotheses were posed:

Question 1: Is there any correlation between EQ and Emotions?

Question 2: Is there any correlation between Creativity and Emotions?

Question 3: Is there any correlation between Creativity and EQ?

To answer the research questions, the following hypotheses were posed:

**Ho-1:** There is no correlation between EQ and Emotions.

**Ho-2:** There is no correlation between Creativity and Emotions.

**Ho-3:** There is no correlation between Creativity and EQ.

## 2. Review of Related Literature

The related literature to the variables of the study namely Emotions, Creativity, EQ and will be presented in the following sections.

### 2.1 Emotions

There has been little agreement across disciplines on how to define the concept of emotion (Boler, 1999). In previous studies, the word emotion was used in many ways which show the researchers' different theoretical viewpoints including physiological, philosophical, historical, sociological, feminist, organizational, anthropological, and psychological perspectives (Oatley, 2000). For instance, Pekrun and Linnenbrink-Garcia (2014) defined emotions as "multifaceted phenomena involving sets of coordinated psychological processes with affective, cognitive, physiological, motivational, and expressive components" (p.2). Robbins and Judge (2013) defined emotions as intense feelings directed at something or someone. Damasio (1994) and Goleman (1995, 1998a, 1998b) argued that to make good decisions in the workplace, feelings are necessary.

For many years research into teacher emotions was surprisingly little. Until very recently, study about the emotional aspects of teachers' lives has developed and expanded (Sutton & Wheatley, 2003). It was in the early 1980s, that the burgeoning of

psychological research on emotions began (Lewis and Haviland, 1993), but little was known about this concept in teacher education until the late 1990s (Sutton & Wheatley, 2003). According to Zembylas (2003), there are three reasons for the lack of studies in this area. Firstly, it is due to this belief that teaching generally was thought as a cognitive activity rather than an affective one. Secondly, emotion was considered as elusive, difficult to grasp or objectively measured; that is why it was avoided to study. Finally, emotion was believed as a feminine subject and soft topic so it is not worth to study. In the same line of inquiry, Fried (2011) stipulated that the importance of emotions was underplayed mainly because they were not directly observable. Recent research shows that all aspects of schooling are closely related to emotion processes (Fried, 2011). That is due to the fact that teachers are assumed to be the cornerstones of each educational system that shape a bridge between their students and knowledge (Heydarnejad, Hosseini Fatemi, & Ghonsooly, 2017). They experience a wide variety of discrete emotions while teaching in the classroom and they are expected to regulate them (Taxer & Frenzel, 2015). Teacher emotions have also been shown to be inextricably linked to student emotions (Meyer & Turner, 2006), because learning is an emotional and a cognitive process (Fried, Mansfield, & Dobozy, 2015).

Teaching is charged with positive and negative emotions. With positive emotions such as enjoyment, pride, enthusiasm, and satisfaction, teachers are more successful because positive emotions enhance teachers to set more challenging learning goals for students and set more ambitious goals regarding their own teaching. (Sutton & Wheatley, 2003). Contrary to positive emotions, negative emotions such as anxiety, anger, shame, and boredom reduce teachers' intrinsic motivation (Ryan & Deci, 2000). Teachers' positive and negative emotions may also influence their categorizing, thinking, problem-solving, and even curiosity (Sutton & Wheatley, 2003). In short, teachers' emotional experiences change the way they behave and teach in their classroom and consequently influence their learners' mental and physical well-being (Heydarnejad, Ebrahimi, & Najjari, in press).

Leafing through the empirical studies conducted in the teachers' emotions domain reveals a mounting attention in recent years. For instance, Hagenauer and Volet (2014)



examined university teachers' emotions in the classroom in a qualitative study. According to the findings, three themes based on emotions were identified. First, it was about intrinsic values and desirable nature of professional teaching. Second, it was related to how much teachers' expectations of students' engagement were fulfilled. Lastly, it was shown that teaching was partially controlled. By the same token, Taxer and Frenzel (2015) studied 226 secondary teachers from Germany. The result of this research indicated that teachers who genuinely expressed their positive emotions were efficacious, mentally healthy, felt related to their students, satisfied with their jobs, and had a low level of emotional exhaustion. However, those who genuinely expressed their negative emotions had low self-efficacy, poor physical and mental health, low job satisfaction, and high level of emotional exhaustion.

### 2.2 Creativity

Regarding the etymology of the word 'creative', Piirto (2004) asserts that it comes from Latin root 'creare' which means 'to make or produce'. The Latin term 'creō' is the root of the lexeme in the word creativity in the English. It means that something new and worthwhile is being created, whether intangible (like an idea, a scientific theory) or tangible (like an invention). Eragamreddy (2013:93) assumes that 'creativity' or 'creative thinking' reveal the kind of thinking that leads to new insights, novel approaches, fresh perspectives, whole new ways of understanding and conceiving of things. Michael Mumford suggested that "we seem to have reached a general agreement that creativity involves the production of novel, useful products" (Mumford, 2003, p.110). Successful intelligence theory posed by Sternberg and O'Hara's (2000), explained creativity as generating products or ideas that are original and valuable. Thus, Fisher (2005) censures reproduced or stereotyped ideas which are called creative, though they may be found fine or elegant. The achievement of new and remarkable things that can significantly change effort is the definition that Gardner (1993) offered for it. Craft conceives a difference between "little c" creativity which concentrates on everyday creativity and "big C" which carries a great impact on society, but 50 definitions of creativity were estimated by Rhodes (1961) in his "4-ps" model. In the world of teaching, ideas and theories are produced which are necessary

for managing the class or making it more productive. Also, to receive a high score on a test of creative ability, a person's responses must diverge from what is customary (Sternberg & O'Hara, 1999).

Research was conducted in psychology and cognitive science on the processes in which creativity may occur and as a result the sources and methods of being creative have been enumerated as 'Incubation' (e.g.: Smith, 2011), 'Convergent and divergent thinking', (e.g.: Guilford, 1967), 'Creative cognition approach', (e.g.: Ward, 1995), 'The Explicit-Implicit Interaction (EII) theory'(e.g.: *Helie S., & Sun R., 2010*), 'Conceptual blending', (e.g.: Koestler, 1964), 'Honing theory', (e.g.: Gabora, & Saab, 2011)., and even to 'Everyday imaginative thought', (e.g.: Roese, & Olson, (1995).

### 2.3 Emotional Intelligence

EQ is defined by Mayer, Salovey, Caruso (2002) as the ability to perceive and express emotions, the ability to assimilate emotions in thought, to understand and try to help regulate emotions and feelings of self and others. Ebrahimi & Khoshsim (2016:138) perceive it as the ability in individuals to grasp their own emotions, inspire the individuals around them, and of course positively manage their relations. Freedman and Jensen (2005) explained EI as individual's ability to choose one's thoughts, feelings, and actions artfully and consciously, in order to reach optimum outcomes in relationship with oneself and others.

EQ is explained as utilizing feelings, thoughts, along with intuition in order to solve problems. It also, based on an understanding of one's own and others' emotions, includes the ability to influence actions and thinking (Geher, 2004; Brackett, Rivers, & Salovey, 2011). Olatoye, Akintude, and Yakasi (2010) emotional intelligence can be conceptualized as a set of acquired skills and competencies that predict positive outcomes at home with one's family, in school and at work.

### 2.4. Creativity, Emotions and EQ

There are signs and theories indicating creativity's susceptibility to affective influences. Also, Furnham (2016) states that there seems, however, to be far fewer studies on EI and creativity; hence, the necessity of conducting the current study. Isen (2002) argued that cognitive activities are influenced by positive affects through three primary effects. Broaden-and-build model of



Fredrickson (2001) also, proposes that positive emotions like love and joy can broaden one's available repertoire of actions and cognitions which enhances creativity. Thus, it could be claimed that the number of cognitive elements available for association and the number of elements that are relevant to the problem increase by positive emotions. Also, numerous meta-analyses (e.g.: Baas et. al., 2008 of 66 studies about creativity and affect) confirm the relationship between positive affect and creativity.

Scientists in the related field have investigated the probable links between creativity and intelligence from the 1900s. Even similar to the Intelligence Quotient (IQ), efforts have been done to achieve a Creativity Quotient of an individual to assess an individual creative ability. The efforts could be divided to two main groups of Psychometric approach and Social-personality approach, yet they were not successful. Sternberg and O'Hara (1999) suggested 5 likely links between intelligence and creativity: Creativity is a subset of intelligence or vice versa, they are overlapping, they are parts of the same construct (with Emotions and more coincident set) or distinct constructs (disjoint sets). A study by Geher, Betancourt, and Jewell (2017) investigated the link between a standard measure of emotion-detection ability and spontaneous measures of creativity. They found a link between the two. There might not be found a burgeoning amount of research on teachers' creativity and its relationship particularly Emotional Intelligence, thus the researchers of the current study investigated it in relation with emotions and EQ.

### **3. Methodology**

The convenient sampling procedure was utilized to select participants to participate in the present correlational study. The profile of the subjects followed by explanations on the utilized instruments will be presented.

#### **3.1 Participants**

Subjects were 160 Iranian Language Institutes EFL teachers in Khorasan, Iran who filled 480 questionnaires; thus, each participant filled 3 questionnaires. The participants' profile goes as follows: they were between 23 and 37 years old with 1 to 16 years of teaching experience. Out of 160 teachers, 84 were females and 76 males.

#### **3.2 Instruments**

Three questionnaires were utilized in the study followed by an interview with all

the participants to ensure the reliability and honesty of their answers.

#### **3.2.1 Emotions Questionnaire for Teachers (EQT)**

Frenzel, Pekrun, and Goetz (2013) designed and validated Emotions Questionnaire for Teachers (EQT) (Appendix I) which is used to assess enjoyment, anxiety, and anger. Khajavi, Ghonsooly, and Hosseini Fatemi (2016) developed items for pride, shame, and boredom. Ranging from 'strongly disagree' to 'strongly agree' each emotion is measured in the questionnaire by four items on a six-point Likert type scale and the questionnaire has 24 items.

#### **3.2.2 Bar-On Emotional Quotient Inventory (Bar-On, 2004)**

The Emotional Quotient Inventory (EQ-i), EQ-360 & EQ-I: YV were developed to assess the Bar-On model of emotional-social intelligence. The EQ-I is a self-report measure (Appendix II) designed to measure a number of constructs related to EI. The EQ-i consists of 133 items and produces an overall EQ score as well as scores for the five composite scales and 15 subscales. The manual reports acceptable levels of reliability of the test. The Persian version of the test was applied because Dehshiri (2003) asserted that the Persian version of the test is both valid and reliable considering Iranian culture. The total reliability of the questionnaire was 0.82, estimated via Cronbach's alpha.

#### **3.2.3 Teacher Creativity Scale (ELT-CS)**

This scale (ELT-CS) contains 63 items and each item is scored using a five-point Likert scale from 1 (always) to 5 (never). There are 7 subscales in ELT-CS: (1) originality and elaboration, (2) fluency and flexibility, (3) person, (4) press and materials, (5) motivation, (6) autonomy, and (7) brainstorming.

After filling the questionnaires, all the teachers were interviewed and the amount of care and honesty reflected in filling the questionnaires was closely examined, as there is always the possibility of lack of paying attention on the part of participants while filling the questionnaires.

### **4. Results**

Results of the study are presented in the current section.



Figure 1: Schematic representation of *t* values of the path coefficient for EQ on Creativity and Emotions

Based on figure 2 EQ influences all the emotions components because *t* value for all of them exceeds 1.96. But EQ does not significantly influence creativity, as *t* value is 1.157 which does not exceed 1.96.

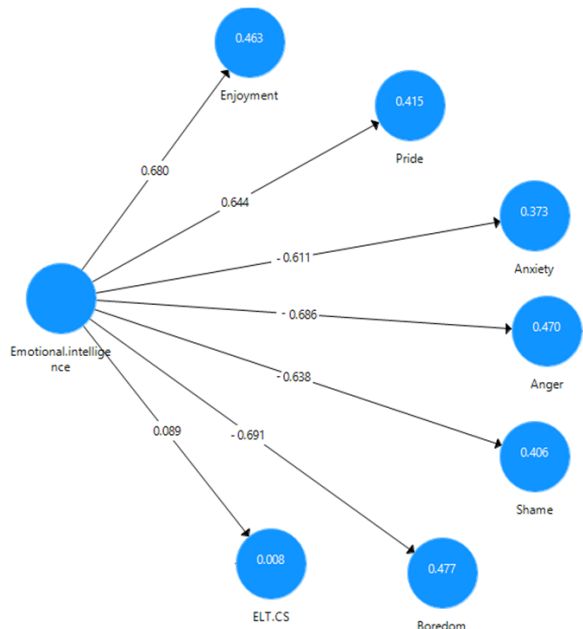


Figure 2: Schematic representation of path coefficient for EQ influence on Creativity and Emotions components ( $\beta$ )

Based on figure 2, EQ positively and significantly influences pride and enjoyment because the coefficients are positive for them. But EQ has a negative and significant influence on components of emotions as the coefficients are negative.

Based on figure 1 and 2, it could be claimed that EQ significantly and positively influences Enjoyment ( $\beta = .680, t = 4.656$ ), Pride ( $\beta = .644, t = 3.956$ ), yet it significantly and positively influences Anxiety ( $\beta = -.611, t = 2.980$ ), Anger ( $\beta = -.686, t = 4.388$ ), Shame ( $\beta = -.638, t = 3.369$ ), Boredom ( $\beta =$

$.691, t = 4.172$ ); furthermore, it was revealed that EQ does not significantly influence creativity ( $\beta = .089, t = 1.157$ ).

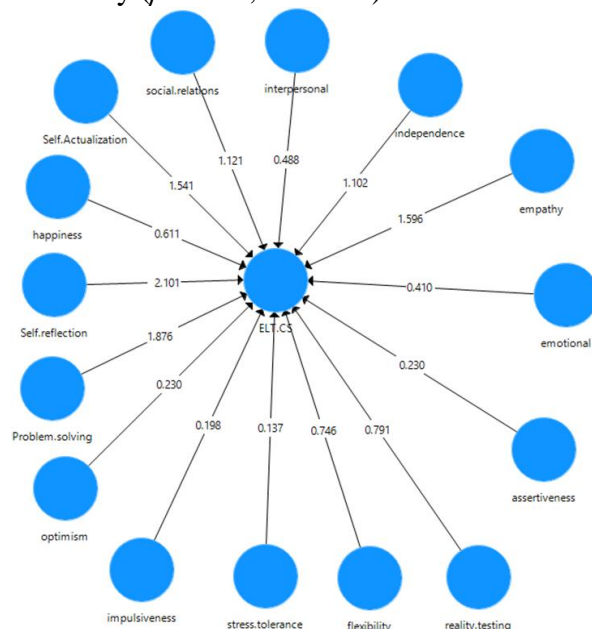


Figure: 3 *t* values for path coefficient significance of EQ components on Teachers' Creativity (ELTs' Creativity)

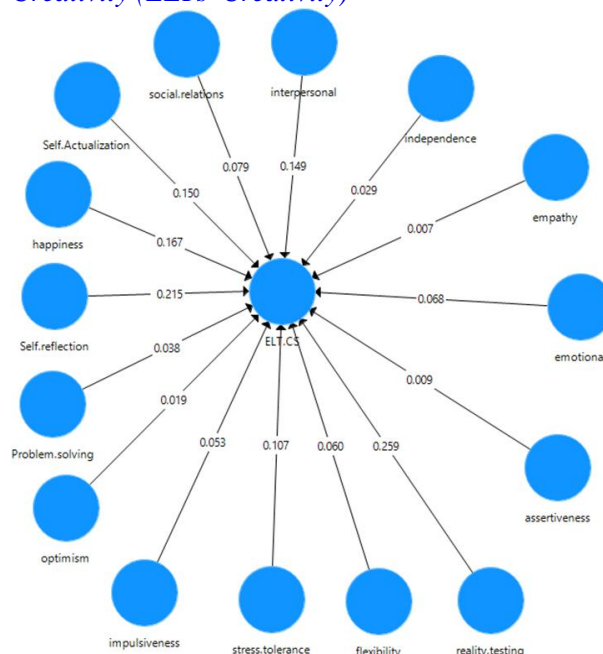


Figure: 4 Path Coefficient values for EQ components influence on Creativity ( $\beta$ )

Based on figures 3 and 4, the results are presented in Table: 1

Table: 1 Summary of results in figure 1 & 2

EQ Components	B	T	Results
Optimism	0.019	0.230	No influence
Impulsiveness	0.053	0.198	No influence
Stress tolerance	0.107	0.137	No influence
Flexibility	0.006	0.746	No influence
Reality testing	0.259	0.791	No influence
Assertiveness	0.009	0.230	No influence
Emotional self-awareness	0.068	0.410	No influence
Empathy	0.007	1.596	No influence
Independence	0.029	1.102	No influence
Interpersonal relationships	0.149	0.488	No influence
Social relations	0.079	1.121	No influence
Self-Actualization	0.150	1.541	No influence
Happiness	0.167	0.611	No influence
Self-reflection	0.215	2.101	Influence observed
Problem solving	0.038	1.876	No influence

Below, the correlation table: 2 shows that the first figure is correlation coefficient (r) the second one is significance level (p) in cases that  $p < 0.05$  the relationship is significant, and it is marked by \*\*.

Table 2: Correlation coefficients among EQ and Emotions components

		Enjoyment	Anxiety	Anger	Pride	Shame	Boredom	Emotional-intelligence
Enjoyment	Pearson Correlation	1	-.514**	-.498**	.420**	-.414**	-.527**	-.506**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000
Anxiety	Pearson Correlation	-.514**	1	.514**	-.331**	.460**	.387**	.457**
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000
Anger	Pearson Correlation	-.498**	.514**	1	-.486**	.476**	.433**	.487**
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000
Pride	Pearson Correlation	.420**	-.331**	-.486**	1	-.409**	-.487**	-.467**
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000
Shame	Pearson Correlation	-.414**	.460**	.476**	-.409**	1	.521**	.470**
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000
Boredom	Pearson Correlation	-.527**	.387**	.433**	-.487**	.521**	1	.574**
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000
Emotional-intelligence	Pearson Correlation	-.506**	.457**	.487**	-.467**	.470**	.574**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	

\*\* Correlation is significant at the 0.01 level (2-tailed).

There is a negative and significant relation between EQ and Enjoyment ( $r = -0.506, p < 0.05$ ), EQ and Pride ( $r = -0.467, p < 0.05$ ) a positive and significant relation between EQ and Anxiety ( $r = 0.457, p < 0.05$ ), EQ and anger ( $r = 0.487, p < 0.05$ ), EQ and shame ( $r = 0.470, p < 0.05$ ), boredom ( $r = 0.574, p < 0.05$ ).

Table: 3 Coefficient correlations among EQ components and Creativity

	Pearson Correlation	Sig. (2-tailed)
Empathy	.063	.427
Independence	.060	.453
Interpersonal	.048	.547
Social-Relations	.122	.122
Self-Actualization	.095	.231
Happiness	.060	.451
Self-Reflection	.220	.005**
Problem-Solving	.096	.223
Optimism	.119	.133
Impulsiveness	.135	.089
Stress-Tolerance	.176	.056
Flexibility	.099	.211
Reality-Testing	.136	.053
Assertiveness	.059	.454
Emotional self-awareness	.102	.199

\*\* Correlation is significant at the 0.01 level (2-tailed).

There is no significant relationship between ELT-CS and empathy ( $r = 0.063, p > 0.05$ ), independence ( $r = 0.060, p > 0.05$ ), interpersonal relations ( $r = 0.048, p > 0.05$ ), social relations ( $r = 0.122, p > 0.05$ ), Self-

Actualization ( $r = 0.095, p > 0.05$ ) happiness ( $r = 0.060, p > 0.05$ ), Problem solving ( $r = 0.096, p > 0.05$ ), optimism ( $r = 0.119, p > 0.05$ ), impulsiveness ( $r = 0.135, p > 0.05$ ) stress tolerance ( $r = 0.176, p > 0.05$ ), flexibility ( $r = 0.099, p > 0.05$ ), reality testing ( $r = 0.136, p > 0.05$ ), assertiveness ( $r = 0.059, p > 0.05$ ) emotional self-awareness ( $r = 0.102, p > 0.05$ ) yet a positive and significant relationship between ELT-CS and Self-reflection ( $r = 0.220, p < 0.05$ ) exists.

### 5. Discussion

The current study was done to examine the interplay between EQ, creativity and emotions. The researchers found no relationship between EQ and creativity, however, EQ components positively and significantly influence positive emotions and the reverse is true for negative emotions; EQ influences negative emotions, negatively and significantly.

The findings of the current study confirm the findings of Torrance, 1975; Richards, 1976; Runco & Albert, 1986; Wallach & Kogan, 1965. It could be explained that when creativity is assessed by performance tests, the correlation between is not high at all, supporting the model of disjoint constructs. As an example, an analysis of 388 correlations between creativity and intelligence demonstrated that the measures correlation varied from .06 to .21. A number of other studies found rather low correlations between intelligence and creative ability (Runco & Albert, 1986; Torrance, 1975; Wallach & Kogan, 1965), supporting the notion that these constructs are mostly distinct mental abilities and confirming the findings of the current study.

The results of the current study disconfirm the results of Cooper and Sawaf (1997) and Akinboye (2003). Adeboye (2003) claimed that whenever individuals need to be creative, they tend to be in an emotional state.

Finding no significant relationship between EQ and creativity among EFL learners is supported by other parallel studies, although the current study investigated it among EFL teachers. Hashemi (2009) investigated EQ in relation to emotional creativity, and creativity and her findings implied no significant relationship among the students majoring in different subjects.

Also, regarding the links between Creativity and emotions, the results of the present research confirm the results of various meta-analyses like what Baas and





colleagues (2008) conducted on 66 studies about creativity and affect, which confirm the relationship between positive affect and creativity.

## 6. Conclusion

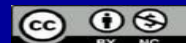
Emotions must be thought of as very powerful potentials in human being as love or hatred could do a lot of changes, and their role must not be neglected in the very important endowment of education. Although they were not found to be significantly related to creativity, their positive relationships exist as it was shown in the results section of the study. The current study shall be replicated across different age groups of learners with wider populations and even across different cultures and the relationship could be tested by other questionnaires. Provided that more promising results would be reached, more investment on Emotions and emotional intelligence enhancement seems to be necessary.

## References

- Adeboye, O.A (2003). Elite Lifestyle and Consumption in Colonial Ibadan. In: A. Oyebade (ed.), *The Foundations of Nigeria: Essays in Honor of Toyin Falola*. Trenton, New Jersey: Africa World Press.
- Akinboye, J. O. (2003). Creativity, Innovation and Success. Ibadan: Stirling-Horden Publishers Nigeria Limited. *Annual Review of Psychology*, 32, 439–476.
- Baas, M., De Dreu Carsten K. W., & Nijstad, B. A. (2008). A meta-analysis of 25 years of mood-creativity research: Hedonic tone, activation, or regulatory focus? *Psychological Bulletin*, 134(6), 779–806. doi:10.1037/a0012815. PMID 18954157.
- Boler, M. (1999). *Feeling power: Emotions and education*. New York: Routledge
- Brackett, M. A., Rivers, S. E., & Salovey, P. (2011). Emotional intelligence: Implications for personal, social, academic, and workplace success. *Social and Personality Psychology Compass*, 5(1), 88–103. Retrieved from <https://doi.org/10.1111/j.1751-9004.2010.00334.x>
- Cooper, R. K., & Sawaf, A. (1997). *Executive E.O: Emotional Intelligence in leadership & organizations*, NY: Grossat/Putram
- Damasio, A. R. (1994). *Descartes' error: Emotion, reason, and the human brain*. New York, NY: G. P. Putnam's Sons.
- De Dreu, C. K. W., Baas, M., & Nijstad, B. A. (2008). Hedonic tone and activation level in the mood creativity link: Toward a dual pathway to creativity model. *Journal of Personality and Social Psychology*, 94(5), 739–756.
- Dehshiri, R. (2003). *The Reliability and validity of EQ-i in Iran's context*. Unpublished master's thesis, Allame Tabataba'i University, Tehran, Iran.
- Ebrahimi, M. R. & Khoshsim, H. (2016). Impact of Emotional Intelligence Enhancement on Test Anxiety among EFL Learners: an Experimental Study. *International Journal of English Language & Translation Studies*. 4(1), 136-145.
- Eragamreddy, N. (2013). Teaching Creative Thinking Skills. *International Journal of English Language & Translation Studies*. 1(2). 91-105.
- Fahim, M., & Zaker, A. (2014). EFL learners' creativity and critical thinking: Are they associated? *Humanising Language Teaching*, 16(3), 1-11. Retrieved from <http://www.hltmag.co.uk/jun14/mart01.htm>
- Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist*, 56, 218-226.
- Fredrickson, B. L. (2004). The broaden-and-build theory of positive emotions. *Philosophical Transactions of the Royal Society B, Biological Sciences*, 359, 1367–1377.
- Freedman, J. & Jensen, A. (2005). *EQ trainer certification manual*. San Mateo, CA: Six Seconds.
- Frenzel, A. C., Becker-Kurz, B., Pekrun, R., & Goetz, T. (2015). Teaching this class drives me nuts! examining the person and context specificity of teacher emotions. *PLoS ONE*, 10(6), 1-15.
- Fried, L. (2011). Teaching Teachers about Emotion Regulation in the Classroom. *Australian Journal of Teacher Education*, 36(3). [http://dx.doi.org/10.14221/ajte.2011v36n3\\_1](http://dx.doi.org/10.14221/ajte.2011v36n3_1)
- Fried, L., Mansfield, C., & Dobozy, E. (2015). Teacher emotion research: Introducing a conceptual model to guide future research. *Issues in Educational Research*, 25(4), 415-440.
- Furnham, A. (2016). The Relationship between Cognitive Ability, Emotional Intelligence and Creativity. *Psychology*, 7(02):193-197. DOI: 10.4236/psych.2016.72021
- Gabora, L. & Saab, A. (2011). Creative interference and states of potentiality in analogy problem solving. Proceedings of the Annual Meeting of the Cognitive Science Society. 20–23, 2011, Boston MA.
- Gardner, H. (1993). *Creating minds*. New York, NY: Basic Books.
- Geher G., Betancourt, K. and Jewell, O., (2017). The Link between Emotional Intelligence and Creativity. *Imagination, Cognition*

- and Personality: Consciousness in Theory, Research, and Clinical Practice, 37(1) 5–22.
- Geher, G. (Ed.). (2004). *Measuring emotional intelligence: Common ground and controversy*. New York, NY: Nova Science Publishing.
- Goleman, D. (1995). *Emotional intelligence: Why it can matter more than IQ*. New York, NY: Bantam Books.
- Goleman, D. (1998a). *Working with emotional intelligence*. New York, NY: Bantam Books.
- Goleman, D. (1998b). What makes a leader? *Harvard Business Review*, 76(6), 93-102.
- Gu, Y. (2003). Vocabulary Learning in a Second Language. *TESL-EJ*, 7, 1-26
- Guilford, J. (1975) Creativity: A quarter century of progress. In: I. Taylor, and J. Getzels (Ed.), *Perspectives in Creativity* (pp. 37-59). Chicago, IL: Aldine Publishing Company.
- Guilford, J. P. (1967). *The Nature of Human Intelligence*. New York: McGraw-Hill.
- Hagenauer, G., & Volet, S. E. (2014). Teacher-student relationship at university: an important yet under researched field. *Oxford Review of Education*, 40(3), 370-388.
- Hashemi, S. (2009). A study on the relationship between emotional intelligence, emotional creativity and creativity among art, literature and science students. *New Training Thoughts Journal*, 5(2), 79-103.
- Helie S. & Sun R. (2010). *Incubation, insight, and creative problem solving: A unified theory and a connectionist model*. *Psychological Review*. 117, 994–1024.
- Heydarnejad, T., Ebrahimi, M., R., & Najjari, H. (2018). On the Associations among Critical Thinking, Reflective Thinking, and Emotions; A case of Iranian EFL Teachers. (in press)
- Heydarnejad, T., Hosseini Fatemi, A., & Ghonsooly, B. (2017). Emotions and Self-regulation: A Case of Iranian EFL High School and Private Language Institute Teachers. *International Journal of Educational Investigations*, 4(4), 82-100.
- Ho, A. G., & Siu, K. W. M. (2011). Emotionalize design, emotional design, and emotion design: A review on their relationships from a new perspective. *The Design Journal*, 15(1), 9–32. <http://dx.doi.org/10.1007/s10648-006-9032-1>
- Isen, A. M. (2002). Missing in Action in the AIM: Positive Affect's Facilitation of Cognitive Flexibility, Innovation, and Problem Solving. *Psychological Inquiry*, 13(1): 57-65.
- Koestler, A. (1964). *The Act of Creation*. London: Pan Books. ISBN 0-330-73116-5.
- Kumaravadivelu, B. (2001). Toward a post-method pedagogy. *TESOL Quarterly*, 35, 537–559. <http://dx.doi.org/10.2307/3588427>
- Lewis, M., & Haviland, J. M. (1993). (Eds.). *Handbook of Emotions*, Guilford Press, New York.
- Meyer, D. K., & Turner, J. C. (2006). Re-conceptualizing emotion and motivation to learn in classroom contexts. *Educational Psychology Review*, 18(4), 377-390.
- Mumford, M. D. (2003). Where have we been, where are we going? Taking stock in creativity research. *Creativity Research Journal*, 15, 107-120.
- Oatley, K. (2000). Emotion: Theories. In A. E. Kazdin (Ed.), *Encyclopedia of psychology*, 3. New York: Oxford University Press, 167-171.
- Olatoye, R., Akintude S. Yakasi, M. (2010). Creativity, emotional intelligence and academic achievement of Business Administration Students. *Electronics journal of Research in Educational psychology*, 8(2), 763-786.
- Pekrun, R., & Linnenbrink-Garcia, L. (2014). Introduction to emotions in education. In R. Pekrun & L. Linnenbrink-Garcia (Eds.), *Educational psychology handbook series. International handbook of emotions in education* (pp. 1-10). New York, NY, US: Routledge/Taylor & Francis Group.
- Piirto, J. (2004). *Understanding creativity*. New York, NY: Great Potential Press. *Psychology*, 7, 193-197. <http://dx.doi.org/10.4236/psych.2016.72021>
- Rhodes, M. (1961). An analysis of creativity. *Phi Delta Kappan*, 42, 305–310.
- Richards, R. L. (1976). A comparison of selected Guilford and Wallach-Kogan creative thinking tests in conjunction with measures of intelligence. *Journal of Creative Behavior*, 10, 151–164.
- Robbins, S. P., & Judge, T. A. (2013). *Organizational Behavior* (15th ed.). Boston, MA: Prentice Hall.
- Roese, N. J. & Olson, J. M. (1995). *What Might Have Been: The Social Psychology of Counterfactual Thinking*. Mahwah, New Jersey: Erlbaum
- Runco, M. A., & Albert, R. S. (1986). The threshold theory regarding creativity and intelligence: An empirical test with gifted and non-gifted children. *Creative Child and Adult Quarterly*, 14, 212–218.
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social





development, and well-being. *American Psychologist*, 55, 68–78.

Siu, K. W. M., & Wong, Yi Lin. (2014). Fostering creativity from an emotional perspective: Do teachers recognize and handle students' emotions? *International Journal of Technology and Design Education*, 26, 105–12.

Smith, S. M. (2011). Incubation. In M. A. Runco; S. R. Pritzker. *Encyclopedia of Creativity Volume I* (2nd ed.). Academic Press. pp. 653–657. ISBN 978-0-12-375039-6.

Sternberg, R. J., & O'Hara, L. A. (1999). Creativity and intelligence. In R. J. Sternberg (Ed.), *Handbook of creativity* (pp. 251–272). Cambridge, MA: Cambridge University Press.

Sternberg, R. J., & O'Hara, L. A. (2000). Intelligence and creativity. In R. J. Sternberg (Ed.), *Handbook of intelligence* (pp. 611–630). New York, NY: Cambridge University Press.

Sutton, R., & Wheatley, K. (2003). Teachers' emotions and teaching: A review of the literature and directions for future research. *Educational Psychology Review*, 15(4), 327-358. <http://dx.doi.org/10.1023/A:1026131715856>

Taxer, J. L., & Frenzel, A. C. (2015). Facets of teachers' emotional lives: A qualitative investigation of teachers' genuine, faked, and hidden emotions. *Teaching and teacher education*, 49, 78-88.

Torrance, E. P. (1975). Creativity research in education: Still alive. In I. A. Taylor & J. W. Getzels (Eds.), *Perspectives in creativity* (pp. 278–296). Chicago: Aldine Publishing Company.

Van Kleef, G. A., Anastasopoulou, C., & Nijstad, B. A. (2010). Can expressions of anger enhance creativity? A test of the emotions as social information (EASI) model. *Journal of Experimental Social Psychology*, 46(6), 1024–1048.

Wallach, M. A., & Kogan, N. (1965). Modes of thinking in young children: A study of the creativity-intelligence distinction. New York: Holt, Rinehart, and Winston.

Ward, T.B. (1995). What's old about new ideas. In S. M. Smith, T. B. Ward & R. A. & Finke (Eds.) *The creative cognition approach*, 157–178, London: MIT Press.

Wundt, W. (1916) quoted in John D. Greenwood (2003) 'Wundt, Völkerpsychologie, and experimental social psychology', *History of Psychology*, 6(1), 70–88.

Zembylas, M. (2003). Caring for teacher emotion: Reflections on teacher self-development. *Studies in Philosophy and Education*, 22(2), 103-125.

#### Appendix I: Emotions Questionnaire for Teachers (EQT)

Gender:	Major:	Degree:	Age:					
			1	2	3	4	5	6
Years of teaching experience:								
Place of teaching:								
Teachers' experiences and Feelings during Teaching. Your answers are confidential. (1= Strongly disagree. 2=disagree. 3=somewhat disagree. 4= somewhat agree. 5=agree. 6=strongly agree.)								
1. I generally enjoy teaching.								
2. I generally have so much fun teaching that I gladly prepare and teach my lessons.								
3. I generally teach with enthusiasm.								
4. I often have reasons to be happy while I teach.								
5. I generally feel tense and nervous while teaching.								
6. I am often worried that my teaching isn't going so well.								
7. Preparing to teach often causes me to worry.								
8. I feel uneasy when I think about teaching.								
9. I often have reasons to be angry while teaching.								
10. I often feel annoyed while teaching.								
11. Sometimes I get really angry while I teach.								
12. Teaching generally frustrates me.								
13. I am proud of my teaching.								
14. Achievements my students have made in my classes make me proud of my teaching.								
15. I talk to my colleagues about how well I teach in my classes.								
16. I am proud of my knowledge of teaching.								
17. I am ashamed of my teaching.								
18. When I cannot answer my students' questions, I feel shameful.								
19. I am embarrassed that I cannot express myself well while teaching.								
20. I feel ashamed because I cannot provide quality instruction in my class.								
21. Teaching sounds boring to me.								
22. Because the time drags I frequently look at my watch.								
23. Teaching the Materials are boring to me.								
24. Students and classroom environment make me bored.								

#### Appendix II: Samples from EQ Questionnaire [مستند EQ]

این پرسشنامه دارای جملاتی است با پاسخ دادن به آنها احساس، طرز فکر و نحوه رفتارشان را در موقعیت ها و زمانهای مختلف توصیف میشود. هر سؤال دارای پنج جواب است:

- 1- هرگز (هرگز در مورد من صادق نیست)
- 2- بندرت (بندرت در مورد من صادق است)
- 3- گاهی (گاهی در مورد من صادق است)
- 4- معمولاً (معمولاً در مورد من صادق است)
- 5- همیشه (همیشه در مورد من صادق است)

دستور العمل:

- 1- جملات زیر را بخوانید و آن جمله ای که بهترین روحیات شما را توصیف می کند در پاسخنامه علامت بزنید.
- 2- پاسخ درست، غلط، خوب یا بد وجود ندارد. توجه داشته باشید به جمله ای پاسخ دهید که واقعاً بیانگر احساسات نه آن چیزی که دوست دارید باشید.
- 3- این پرسشنامه محدودیت زمانی ندارد اما سعی کنید سریع پاسخ دهید.
- 4- به همه سوالات پاسخ دهید.

- 1- سعی می کنم برای حل مشکلاتم برنامه ریزی کنم و با دقت عمل کنم.
- 2- بر این سخت است که از زندگی لذت ببرم.
- 3- ترجیح می دهم کارهایی انجام دهم که نحوه انجام آن دقیقاً مشخص شده باشد.
- 4- می دانم چگونه از عهده مشکلات سخت برآم.
- 5- با هر کس که برخورد می کنم از او خوشم می آید.
- 6- سعی می کنم زندگی هدفمندی داشته باشم.
- 7- کاملاً بر این راحت است عواطفم را بیان کنم.
- 8- سعی میکنم نگاه واقع بینانه ای به زندگی داشته باشم و از خیال پردازی و رویا پردازی بپرهیزم.
- 9- من قادر به درک حالتهای هیجانی خود هستم.
- 10- در این امر محبتم به دیگران مشکل دارم.
- 11- در اکثر موقعیت ها به خود اطمینان دارم.
- 12- احساس میکنم که دچار مشکل فکری (روحی) هستم.
- 13- کنترل خشم بر این مشکل است.
- 14- شروع فعالیتهاى تازه بر این دشوار است.
- 15- وقتی با یک موقعیت مشکل مواجه می شوم،مایلیم تمام اطلاعات لازم را در مورد آن جمع آوری کنم.
- 16- دوست دارم به دیگران کمک کنم.
- 17- لبخند زدن بر این سخت است.
- 18- قادر به درک احساسات دیگران نیستم.
- 19- وقتی با دیگران کار می کنم، تمایل دارم بیشتر به نظرات آنان عمل کنم تا به نظرات خودم.
- 20- معتقدم می توانم به بالاترین موقعیت ها دست پیدا کنم.
- 21- من واقعاً نمی دانم چه توانایی هایی دارم.
- 22- نمی توانم نظراتم را برای دیگران بیان کنم.
- 23- بر این سخت است که عواطف صبیق خود را با دیگران در میان بگذارم.
- 24- من اعتماد به نفس ندارم.
- 25- فکر می کنم از نظر روحی بیمار هستم.
- 26- نسبت به اکثر کارهایم خوش بین هستم.
- 27- وقتی شروع به حرف زدن می کنم قطع کردن آن بر این مشکل است.
- 28- به طور کلی سازگاری با محیط بر این دشوار است.
- 29- دوست دارم پیش از حل مشکل آن را مرور کنم.
- 30- سه استفاده کردن از دیگران بر این دشوار نیست، به خصوص اگر آن ها مستحق آن باشند.
- 31- فرد شادی هستم.
- 32- ترجیح می دهم دیگران بر این تصمیم بگیرند.
- 33- می توانم بدون عصبی شدن زیاد از عهده ی فشار و ناراحتی ها برآم.
- 34- نسبت به دیگران خوش بین هستم.
- 35- بر این سخت است که عواطفم را درک کنم.
- 36- در چند سال گذشته موفقیت های اندکی داشته ام.
- 37- هنگامی که از دست دیگران عصبانی هستم می توانم به آن ها بگویم.
- 38- نتایج عجیب و غریبی دارم که نمی توانم آن را بگویم.
- 39- دوست شدن با دیگران بر این آسان است.
- 40- من برای خود احترام قائل می شوم.
- 41- کارهای غیر عادی از من می زنند.
- 42- زود از کوره در می روم و و این باعث مشکلاتی بر این شده است.
- 43- نمی توانم نظرم را عوض کنم.
- 44- خیلی خوب احساسات دیگران را درک می کنم.
- 45- وقتی با مشکلی مواجه می شوم در اولین قدم درباره ی آن به فکر و تأمل می پردازم.
- 46- دیگران به سختی می توانند به من وابسته شوند.
- 47- از زندگی ام راضی هستم.
- 48- بر این سخت است که مسئلهای تصمیم بگیرم.
- 49- تحت فشار، عملکردم خوب نیست.
- 50- در زندگی ام نسبت به هیچ کار بنی نمی زنم.
- 51- از کارهایم لذت نمی برم.
- 52- بر این سخت است عواطف صمیمانه ام را بیان کنم.
- 53- سایرین افکار مرا درک نمی کنند.
- 54- دوست دارم جزء بهترین افراد باشم.
- 55- دوستانم می توانند موضوعات خصوصی خوششان را به من بگویند.
- 56- درباره ی خود احساس خوبی ندارم.
- 57- من چیزهایی می بینم که دیگران نمی بینند.
- 58- دیگران به من می گویند هنگام بحث صداقت را پایین بیاورم.
- 59- من به آسانی با موقعیت های جدید سازگار می شوم.
- 60- موقع حل یک مشکل ابتدا راه حل های مختلف را در نظر می گیرم، سپس بهترین را انتخاب می کنم.