

# Investigating the Relationship between Emotion of Thought and Personality Traits and Creativity with the Mediating Role of Experiential Intelligence among High School Students

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## Abstract

The objective of this study was to investigate the relationship between emotion of thought and personality traits and creativity with the mediating role of experiential intelligence among high school students. The method of this research is correlational. The statistical population of the present study included male and female high school students in Rasht city with 1000 students, which 400 of them were girls and 600 were boys. Using Krejcie and Morgan's table, the sample size was estimated to be 266 people. Based on multistage cluster random sampling, 118 students out of 400 girl students and 148 students out of 400 boy students were selected. Measurement tools in this study were Creativity Assessment Questionnaire known as Abedi's Creativity Test (1993), Berger's Personality Test (Mansour, 1962), and Emotion of Thought Questionnaire (Kazemi, 2005). The results showed that creativity was positively and significantly associated with all variables of emotion of thought and creativity. Experiential intelligence had a significant relationship with all variables of emotion of thought except for emotional activity and personality traits except for activity. Creativity also showed significant correlation with experiential intelligence. Creativity showed the highest correlation with cognitive tenacity and sustainability. Creativity is based on an interactive personality, emotional, and cognitive framework.

**Keywords:** Emotional Intelligence, Emotion of thought, Personality Traits, Creativity, High School Students

## INTRODUCTION

Creativity is the capture of the mind in a set of acquired knowledge that is already collected in the mind for the aim of invention and it is based on imagination. A glance at human life shows intelligence quotient of a person does not reflect the success of a person in his or her life, in fact, intelligence quotient (IQ) cannot predict what the reaction of the person will be for ups and downs in the life, how he or she decides at different times, to what extent is his or her social information, and generally, high IQ does not guarantee success, well-being, proper social status, and satisfaction with life. Every behavior must have an emotional aspect. Behavior comes from motivation. Motivation without emotion and affection will not have the force needed to move and guide. Studies have indicated that the individuals' way of expressing their cognitive abilities, such as intelligence and creativity, depends on their personality <sup>[1]</sup>. Cognitive approaches to creativity suggest that through investigating perceptions or memory, the fundamentals of creativity can be examined. In the cognitive domain, creativity is often inferred through investigation of intelligence <sup>[2]</sup>.

In line with the development of cognitive approach, work on the area of personality-social approach has focused on personality variables, motivational variables, and social cultural environments as sources of creativity. Certain personality traits often distinguish creative people <sup>[3, 4]</sup>, and through correlational studies that compare high and low creative samples, a large set of relevant traits were identified <sup>[5]</sup>. These traits include independence in judgment, self-

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**How to cite this article:** Baghban, N., Manzari Tavakooli, A., Tajrobehkar, M. Investigating the Relationship between Emotion of Thought and Personality Traits and Creativity with the Mediating Role of Experiential Intelligence among High School Students. Arch Pharma Pract 2020;11(S1):94-104.

confidence, tendency towards cognitive beauty, freedom of action to experience, and risk taking. Suggestions for self-actualization and creativity can also fall into the realm of personality. According to Maslow (1968), fearlessness, courage, freedom, self-acceptance, and other traits help one's perception of his or her potential talents. Autonomy, individuality, and independence have been emphasized in many studies as the personality traits of creative people<sup>[5-7]</sup>. The relationship between creativity and intelligence can be sought in the realm of threshold theory, or in the link between creativity and giftedness. The threshold theory suggests that creativity and intelligence are correlated only when IQ is lower than 120. Common tools to assess the IQ among a sample of 4 to 6 grade students with IQ levels higher than average also showed a status independent of visual creativity factors<sup>[8]</sup>.

Also, the investigation of threshold theory based on multiple intelligences among elementary students showed that intelligence and creativity were not generally correlated with each other, but threshold theory depends on talent. Creativity was correlated with visual-spatial, natural, physical-kinetic, and linguistic talents<sup>[9]</sup>. Also, as noted, the majority of the studies have focused on the relationship between creativity and talent (as a specific intelligence)<sup>[10]</sup>. Also, emotion of thought theory was first presented at the 17th International Conference on Gifted Children, and then, developed in other international forums<sup>[11]</sup>. This theory focuses on the integrated nature of the cognitive and emotional domains of creativity and attributes the creative process to the existence of cognitive and emotional transformations. Accordingly, there are usually two major emotions involved in the emergence and formation of creativity, including dynamism and restlessness. The share of each of these two emotions in creativity depends on individual differences (such as intelligence, age, gender, cultural factors). Dynamism means feeling strong along with a fascination in a curious and active experience for an exciting big discovery, and restlessness refers to the lack of fear, inner engagement. Restlessness originates from circulation of thought associated with physical manifestations and the person feels that he or she is under pressure for an activity<sup>[11]</sup>.

The emotional components of thought are related to the dynamism of cognitive tenacity and emotional motion. It is in relation to restlessness, psychic power and emotional motion<sup>[12]</sup>. Using existing theories of personality, Kobasa defined tenacity as a combination of beliefs about oneself and the world that originates from an integrated and coordinated action, commitment, control, and challenge<sup>[13]</sup>. The results of a study conducted by Kazemi (2017) showed that in general, the creativity of gifted and talented adolescents, both boys and girls, was positively correlated with all six components of dynamism of emotion of thought test and negatively correlated with the four elements of restlessness scale, but it is independent of two components of restlessness (circulation of thought and the physical manifestations of thought). Accordingly, the objective of this study was to investigate the

relationship between emotion of thought and personality traits and creativity with the mediating role of experiential intelligence among high school students.

## THEORETICAL FOUNDATIONS OF RESEARCH

### Creativity

Creativity involves a process that consists of three stages, including constructing the readiness and obtaining data related to giving an idea and evaluation. Creativity is an Arabic word rooted in word “Khalgh” means “to create”. In Dehkhoda's Dictionary, creativity means to create and a creative person is one who has new ideas. Wallace (2003) has shown that in creative classes, thinking is more valuable than memory. Creativity is the potential and ability that is manifested in human thought, behavior, and action. If the conditions for its development and flourish are not provided, the person will be deprived of this vital blessing. Nowadays, all researchers and scholars believe that human power is rooted in his or her creativity. Creativity is the key and base of progress and a barrier for dependency of a dynamic community. The creativity is a pathway to the bright future and it is the base of human comfort and well-being in personal and social life at the present time and future<sup>[14]</sup>.

Torrance (2010) describes creativity as fluency, flexibility, originality, and in some cases, describes it as elaboration. In the tests used by Guilford, Torrance and based on divergent thinking, it includes four components of fluency, flexibility, originality, and elaboration. Fluency is the ability of the mind to create a large number of ideas for one subject. Flexibility means the ability of the mind to generate varied ideas on a subject. Originality means our ability to generate innovative and unique ideas. Elaboration means our ability to deal with an idea and to expand it. Although there were many disagreements about its definition in the early years when the concept of creativity was presented, researchers have reached an agreement on a simple but comprehensive definition of it. Accordingly, they define creativity as generating new and useful ideas or solutions. Nowadays, psychologists believe that creativity is not innate but can be acquired. Through training, it is possible to teach children to think of unusual solutions and through divergent thinking, examine the problems and find appropriate solutions<sup>[15]</sup>. Many definitions have been provided for creativity so far. Sternberg (2001) argues that creativity is a combination of the power of initiative, flexibility, and sensitivity to theories that enable one to think about a productive outcome that results in the personal consent and satisfaction of others. However, many researchers have reached a comprehensive and single definition of creativity. Accordingly, they define creativity as generation of new and useful ideas or solutions. Some research is also available on the components of creativity. For example, Amabile (1983) divides creativity into three components, including specialized knowledge, innovative thinking, and motivational skills. However, Torrance and Goff (1989) view creativity in four main factors: (1) fluency

means the ability to generate many ideas; (2) initiative means the ability to generate new, unusual and unique ideas; (3) flexibility means the ability to generate many different and varied ideas or methods; 4) elaboration means the ability to pay attention to details.

### Personality

A glance at the definitions of personality shows that not all the meanings of personality can be found in a particular theory, but the definition of a personality depends on the type of the theory of each scientist. Mansour argues that personality is transformative, and any definition of personality involves a stopping point for a process. Based on "genetic psychology", in terms of both methodology and content, he believes in a definition that is completely justified and appropriate for the present status. Accordingly, he views the personality of the individual at any moment of his or her evolution as a manifestation of his or her pervasive adaptive capacity, and even when the subject of the definition of personality is merely pursued from a psychological point of view, its score is very broad. Personality is specific experimental concepts that are part of personality theory and are used by the observer. Due to the lack of integration in personality theory, it is difficult to provide a description of it that appropriately includes all the diverse and conflicting elements in this complex and difficult field of science. The best definition that can be provided here is the one that reflects the view of most psychologists on the precedence of practice to theory. Accordingly, it is considered as abstract of those stable personal traits that is very important to one's interpersonal behavior. In applying this definition, we are also influenced by Allport's (1937) assertion that personality is exactly what a person really is, meaning that the personality contains the deepest and most profound traits of a person.

### Experiential intelligence

From a physiological point of view, intelligence is a phenomenon manifested by the activity of the outer cortex cells of brain and psychologically, it plays the role of adapting living organisms to environmental and biological conditions [16]. Experiential intelligence means the ability to experience what is known to clarify the subject. It begins with arousing pervasive curiosity with any ambiguous or complex problem. Experiential intelligence involves active sensory learning, especially the use of observation and action in the environment, which is associated with restlessness to experience what is known and an insistence to accompany it, and in fact, no learning occurs without experience. To detect experiential intelligence, we redefine it in the interactive school. This kind of intelligence means the ability to experience what is known to clarify the subject. It begins with arousing pervasive curiosity with any ambiguous or complex problem. Experiential intelligence involves active sensory learning, especially the use of observation and action in the environment, which is associated with restless to experience knowledge, and in fact, no learning occurs without experience. Based on this definition, we look at examples of

the ability to experience knowledge. When the ability to learn is possible through direct experience, we will deal with experiential intelligence. There are examples of this intelligence, such as a person who has observed a sport but learns through exercise and experience or a child who has high curiosity about the swimming experience. When a child is prevented from doing a work, he or she will try to do it to meet his curiosity needs for discovering it. Another example is a child who breaks his or her toy to see what mechanism is in it. A child who experiences a mobile phone or computer so much that he or she learns to work with it. Also, a child who has seen a musician in playing and he or she experiences the music instrument and practices it well enough to succeed. In the experience of the knowledge, the role of observational learning is critical.

Therefore, experiential intelligence means learning through experience, or sensory-motor integration for cognition. Sensory-motor integration is an important element and component of experiential intelligence. Experiential intelligence defines the way a person behaves when confronted with a new event, and then improves his or her performance so that his or her behavior becomes better. People who are learning something use this intelligence, accept people as they are, and think before they speak, and behave with a deep reflection. Experiential intelligence, sometimes also called creative intelligence, allows us to invent new methods for unfamiliar issues [11]. In fact, experiential intelligence consists of three factors of sensory acuity, observation, and action. Studies refer to association of intelligence with creativity [17]. Intelligence and creativity both refer to academic performance. Therefore, the relationship between intelligence and creativity has been generally emphasized. Based on most of the studies, creativity has a significant relationship with intelligence [6, 17].

### Emotion of thought

Emotion of thought theory was first presented at the 17th International Conference of Gifted and Talented Children), and then, developed in other international forums [11, 18]. This theory focuses on the integrated nature of the cognitive and emotional domains of creativity and attributes the process of creativity to the existence of cognitive and emotional transformations. Accordingly, there are usually two major emotions involved in the emergence and formation of creativity, including dynamism and restlessness. The share of each of these two emotions in creativity depends on individual differences (such as intelligence, age, gender, cultural factors).

The broadest field of using this theory is in explaining the process of creativity, decision-making, problem solving, and emotional-cognitive failures. In explaining this theory, it should be stated that wherever an idea arises, a specific emotion can be found, so that none of them is separable. There is a unity of thought and feeling. When that feeling arises, it is inevitably emerged in the "emotion" form that we refer to such feeling as "emotion of thought". However, it

should be emphasized that not every thought necessarily leads to emotion. Dynamism means the feeling of strong empowerment along with fascination and pursuit of a curious and active experience for a great, new, and exciting thought. This strong feeling is associated with psychosomatic states such as body shivering, thirst and hunger. "Dynamism" in the broad sense means that one's curiosity is aroused by any ambiguous problem in the domain of his or her favorite activities, and he or she is, despite all difficulties, engaged with it without a sense of helplessness and without considering the time spent, to discover the fact and clarify the issues. Accordingly, such a person is constantly thinking of a necessity of doing something great, especially a new one, and his or her life will be accompanied with exciting and problematic thought and he or she will pursue these exciting, adventurous, yet dangerous curiosities through his or her experiences. These states are accompanied by obvious wit, easily expression of emotion and movement, enjoyment of physical activity, body shivering, and thirst and hunger. Restlessness refers to the gradual mental exhaustion caused by the "circulation of thought" that is associated with psychosomatic disorders.

## METHODOLOGY

In this research, non-experimental or descriptive method was used. Initially, the researcher referred to District 2 Education Department. The number of girl schools was 7 and the number of boy schools was 9. Three girl schools and 5 boy schools were randomly selected. Accordingly, 20 classes and a total of 253 students were selected. Multistage cluster random sampling method was used and then the questionnaires were distributed. The statistical population of the present study included all girl and boy first-grade high school students in the District 2 of Rasht who were studying in public schools in the academic year of 2018-2019. The number of students was 1000, of which 400 were girls, and 600 were boys. Sample size was determined to be 266 using Krejcie and Morgan table. Based on multistage random cluster sampling method, 118 out of 400 girl students and 148 out of 400 boy students were selected. Data analysis was performed using SPSS version 24 software, and descriptive data including mean, standard deviation, standard error, frequency table and correlation coefficient were used and multivariate regression was used for statistical analysis of the test. To collect the data, Creativity Assessment Questionnaire

known as the Abedi's Creativity Test (CT), Berger's Personality Test (based on Torrance theory) that included 9 components and each included 10 questions, and Thought of Emotion Questionnaire, Experiential Intelligence, and Kohs Block Design Test were used.

## RESULTS

The main dependent variable in the present study was students' creativity. This variable has four components of fluency, elaboration, originality, and flexibility. The total score of creativity is also derived from the sum of the scores on these four components. The following table presents the descriptive indices of this variable along with its components:

**Table 1: Descriptive indices of creativity variable (n = 249)**

Variable	Mean	SD	Skewness	Kurtosis	Min	Max
Fluency	27.8032	5.52172	-.583	.669	8.00	40.00
Elaboration	11.9438	3.34882	.137	-.132	3.00	22.00
Originality	19.4297	5.17400	-.188	.509	3.00	32.00
Flexibility	14.4217	3.61489	-.230	-.518	5.00	22.00
Total score	73.6827	15.22968	.044	1.577	28.00	144.00

The data of table above shows that the mean students' creativity is 73.68 with a standard deviation of 15.22. The range of variable variations is between 28 and 144. The indices of Skewness and Kurtosis are also in the range of -1 to +1, indicating that the distribution of variables is normal. The kurtosis index of the total creativity score is 1.57. Such state is observed in some of the variables due to the nature of the variable studied. As most of the creativity component scores will be used in the present study and the total creativity score will not be used in the original analysis, this will not be a problem. In the present study, experiential intelligence was considered as the intermediate or mediating variable. Two factors of number of true answers and the amount of time spent were used to assess this variable, and the assessment was performed in two stages. The following table presents the descriptive indices of this variable in two stages:

**Table 2: Descriptive indices of experiential intelligence (n = 249)**

Variable		Mean	SD	Skewness	Kurtosis	Min	Max
First stage	Number of true answers	6.1204	3.91369	1.035	.746	1.00	17.00
	Amount of time spent	218.7801	272.85435	2.672	7.060	18.00	1347.00
Second stage	Number of true answers	7.4869	4.14965	.704	-.182	1.00	17.00
	Amount of time spent	283.3037	315.37560	1.999	3.327	20.00	1544.00
Mean of two stages	Number of true answers	6.8037	3.88003	.960	.376	1.50	17.00



Amount of time spent	251.0419	282.58757	2.197	4.191	35.00	1276.00
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Based on the data of the table above, the mean number of cubes was about six in the first stage and seven in the second stage. There is also a difference between the two stages in terms of time spent to perform the assignment, and the mean time in the second stage increased due to the increased number of true answers in the second stage. Subjects were divided into three groups based on two factors: 1- The group that its subjects has equal number of true answers, equal time spent to perform the assignment, and equal number of cubes made, 2- The group that its subjects spent less time to perform the assignment and showed higher performance, 3- The group that its member spent more time to perform the assignment, and showed lower performance. The following tables present the frequency of the subjects with regard to these two factors.

The following table shows the frequency of people according to their performance in the correct number of cubes:

**Table 3: Status of the subjects in terms of number of true answers in two stages**

	N	%
Better performance in the second stage	158	63
Equal performance in the second stage	67	27
poor performance in the second stage	24	10

**Table 4- status of subjects in terms of time of performing the assignment**

	N	%
Less time in the second stage	91	37
More time in the second stage	158	63

**Table 5: The status of subjects based on the combination of number of true answers and the time spent in two stages**

status of subjects in two stages in terms of number of true answers and the time	N	%
More true answers in the second stage and less time in the second stage	5	2
Equal number of true answers in two stages and less time in the second stage	66	27
Greater number of true answers in the second stage and more time in the second stage	150	60
Equal number of true answers in two stages and more time in the second stage	23	9
Less number of true answers in the second stage and less time in the second stage	5	2

According to the data of the table above, the status of the subjects improved in the second stage and only about 2%

were in poor performance. The following table presents the descriptive indices of the variable of emotion of thought and its secondary components. This variable is considered as one of the independent variables.

**Table 6: Descriptive indices of emotion of thought variable and its components (n = 249)**

Variable	Mean	SD	Skewness	Kurtosis	Min	Max
Cognitive tenacity	52.4869	11.81429	.451	.287	27.00	91.00
Emotional motion	37.4817	8.32614	-.340	-.279	13.00	54.00
Psychic power	44.5812	6.89259	-.113	-.138	26.00	63.00
Psychic restlessness	65.1990	18.53538	.259	-.529	17.00	113.00

The data of the table above indicate that psychic restlessness has the highest mean (65.19) and motion has the lowest mean (37.48). The skewness and kurtosis indices are also in the range of -1 and +1, indicating the normal distribution of scores for these variables. According to statisticians, if the skewness and kurtosis indices are within this range, it will indicate that the distribution of scores is normal [19, 20].

In the present study, personality traits were considered as the second independent or exogenous variable. This variable has four secondary components of activity, sustainability, uniqueness, and superiority-seeking. The following table presents descriptive indices of personality traits:

**Table 7: Descriptive indices of personality traits (n = 249)**

Variable	Mean	SD	Skewness	Kurtosis	Min	Max
Activity	47.1257	14.00206	.195	-.308	12.00	81.00
Sustainability	55.5602	12.04663	-.140	-.607	25.00	81.00
Uniqueness	54.5183	14.36584	-.031	-.021	18.00	90.00
Superiority-seeking	53.4398	12.65432	-.082	-.264	13.00	81.00

According to the data of the table above, the mean of personality traits in sustainability is about 55, and has the highest mean among the four personality traits. Skewness and kurtosis indices of both variables are in the range of -1 to +1.

**Table 8:** Matrix of Pearson correlation coefficients among the main research variables

Variables	(1)	(2)	(3)	(4)	(5)	(6)
<b>Tenacity (1)</b>	1					
<b>Motion (2)</b>	299.0**	1				
<b>Psychic power (39)</b>	419.0**	403.0**	1			
<b>Restless (4)</b>	478.0**	001.0	101.0	1		
<b>Experiential intelligence (5)</b>	610.0**	083.0	220.0**	218.0**	1	
<b>Creativity (6)</b>	638.0**	269.0**	349.0**	267.0**	472.0**	1

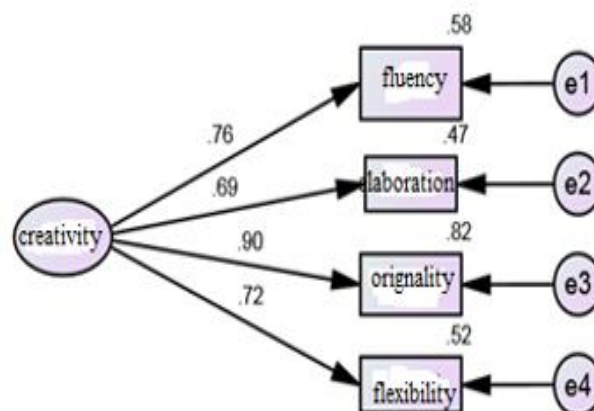
Based on the correlation coefficients reported in the above matrix, creativity has a positive and significant correlation with all variables. Experiential intelligence also has a significant relationship with all variables of emotion of thought except for the emotional motion variable. The highest correlation coefficient was observed between the creativity variable and cognitive tenacity ( $r = 0.638$ ). The intensity of most correlation coefficients was classified according to the classification (small = 0.10-0.29, moderate = 0.30-0.49, large = 0.50-1). All the coefficients are also consistent with the theoretical foundations of the variables.

**Table 9:** Matrix of Pearson correlation coefficients among the main research variables

Variables	(1)	(2)	(3)	(4)	(5)	(6)
<b>Activity (1)</b>	1					
<b>Sustainability (2)</b>	277.0**	1				
<b>Uniqueness (3)</b>	348.0**	189**0	1			
<b>Superiority-seeking (4)</b>	270.0**	277.0**	420.**	1		
<b>Experiential intelligence (5)</b>	107.0	0/333**	0/176*	.0**	1	
<b>Creativity (6)</b>	244.0**	489.0**	.0/**	.0**	472**0	1

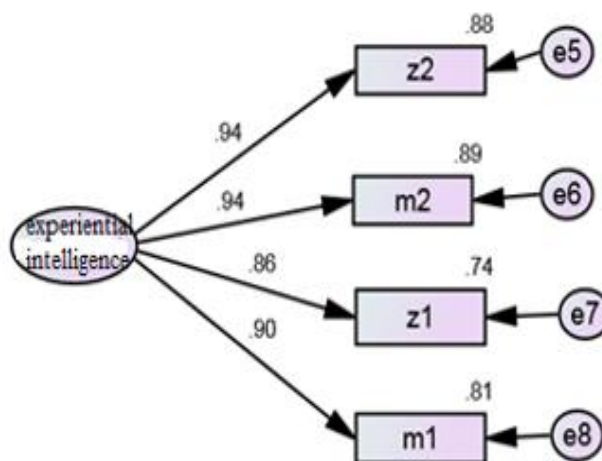
Based on the correlation coefficients reported in the above matrix, creativity has a positive and significant correlation with all variables. The relationship between experiential intelligence and all personality variables, except for the activity variable ( $r = 0.107$ ), was significant. The highest correlation coefficient was found between creativity and sustainability variable ( $r = 0.489$ ).

In the present study, there are two latent constructs for creativity and experiential intelligence, so their measurement model must be examined before performing structural equation modeling. The following figure illustrates creativity construct measurement model:



**Figure 1:** Creativity construct measurement model

As seen, there is a significant path coefficient between the observational or indicator variables of creativity and construct of creativity, and the coefficients are above 0.32 and can be included in the structural model as the creativity construct indicator variable.



**Figure 2:** Experiential intelligence construct measurement model

The path coefficients calculated in the figure above show that all four indicator variables defined on the experiential intelligence construct have a significant value and can well measure the latent construct of experiential intelligence. After confirming the hypotheses and confirming the measurement model of latent constructs, the structural model of the present study was examined.

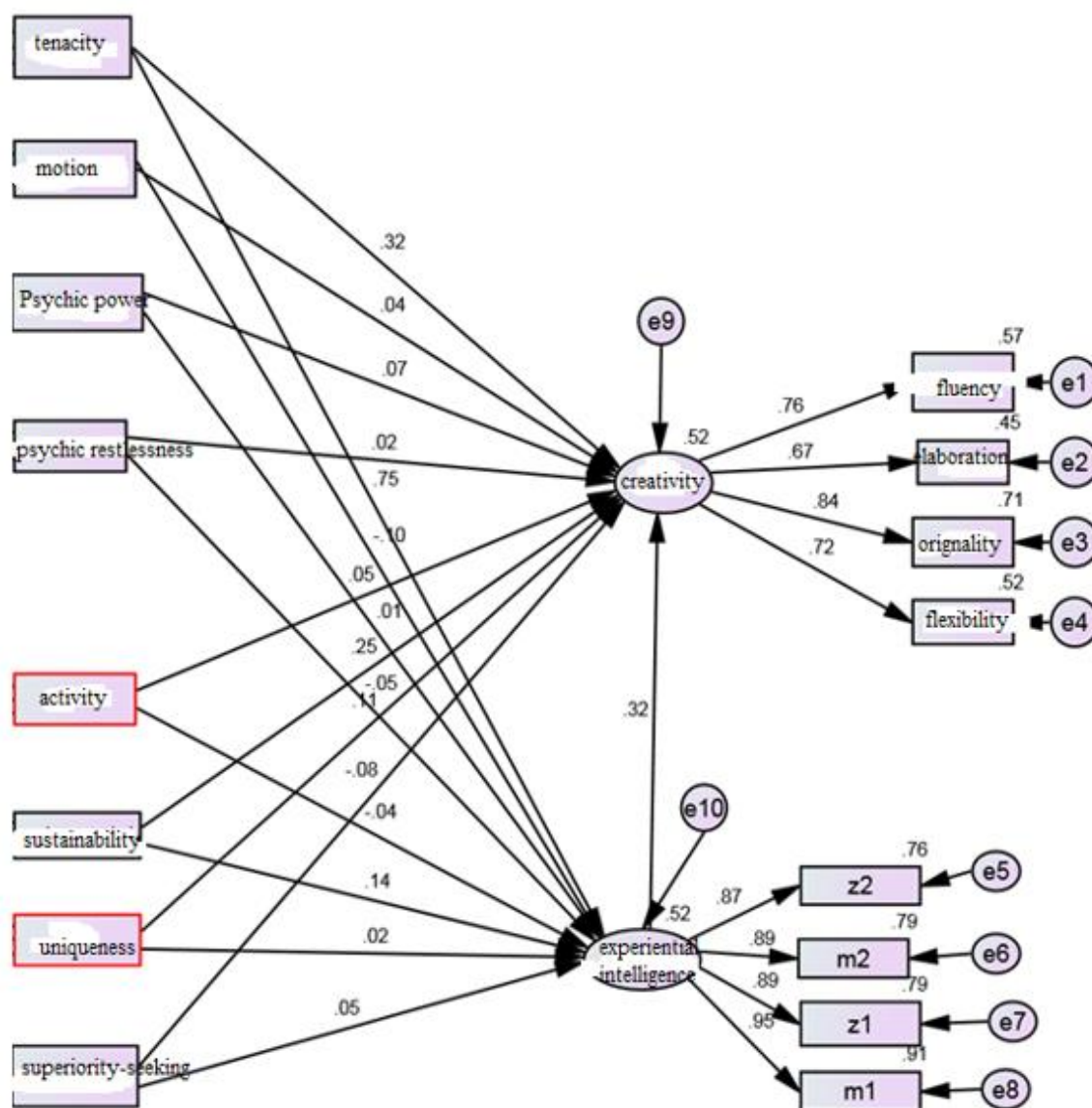
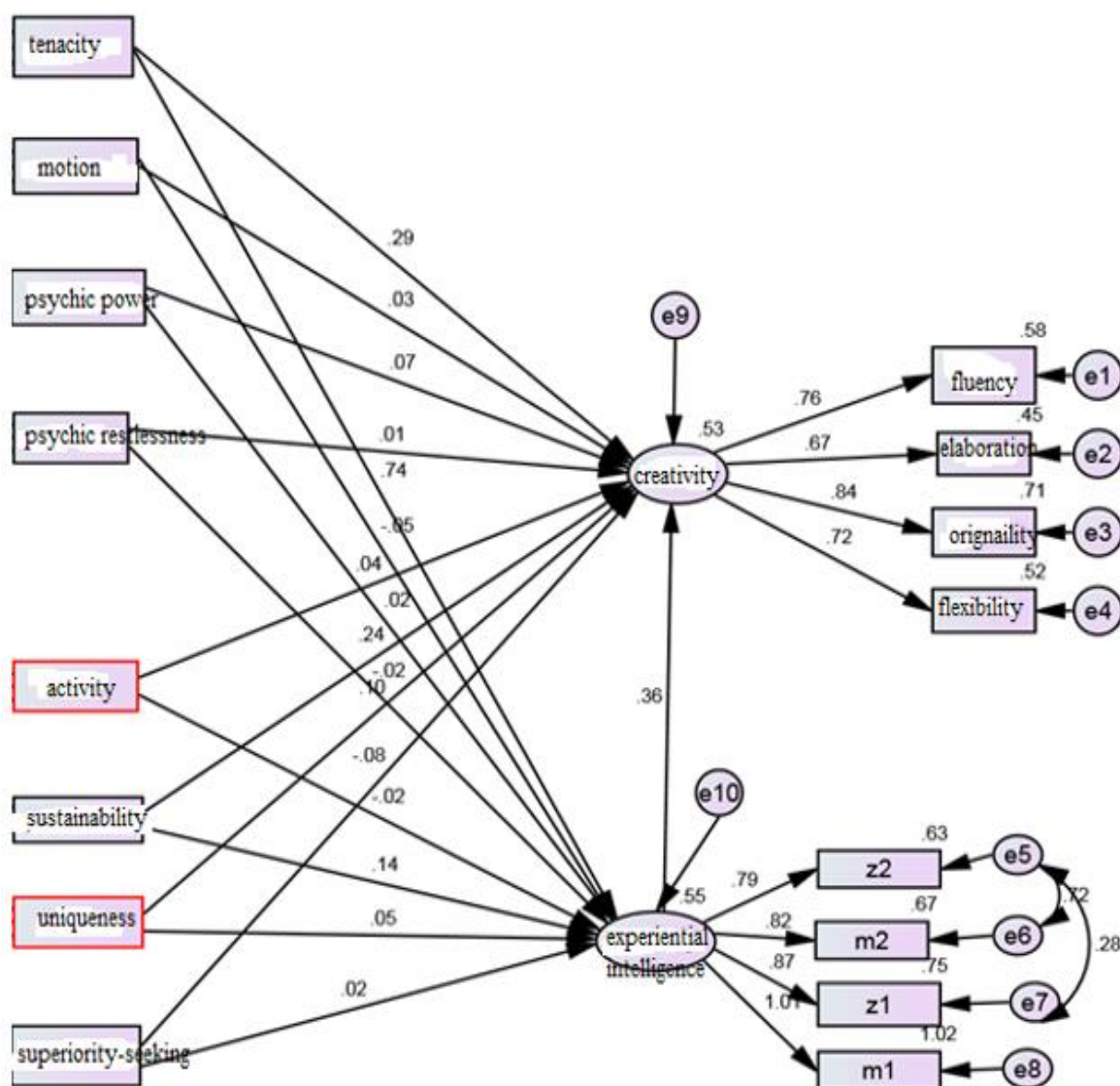


Figure 3- Initial model of research

Table 10- Fitness indices of the research model

Fitness indices	( $\chi^2$ )	df	$\chi^2/df$	RMSEA	GFI	AGFI	IFI	TLI	CFI
Initial model	404.38	83	4.87	0.12	0.84	0.74	0.86	0.80	0/.
Acceptable value	Close to zero	-	Below 3	<0/08	>0.90	>0.80	>0.90	>0.90	>0.90

The fitness indices of the initial model in the table above show that all the fitness indices are within the acceptable range.



**Figure 4:** Modified and final model of research

As seen in the figure above, only two covariances between the errors 5e, 6e and 7e were added to the initial model. The

following table shows the fitness indices of the final research model:

**Table 11:** Fitness indices of the research model

Fitness indices	( $\chi^2$ )	df	$\chi^2/df$	RMSEA	GFI	AGFI	IFI	TLI	CFI
Initial model	205.88	81	2.54	0.079	0.91	0.85	0.	0.92	0.94
Acceptable value	Close to zero	-	Below 3	<0.08	>0.90	>0/.	>0.90	>0.90	>0.90

As shown in the table above, by creating two error covariances, the degree of freedom of the model was reduced to two cases and changed from 83 to 81, and all the fitness

indices increased to an acceptable value, so the overall fitness of the model was confirmed.



**Table 12: Significance of non-standard direct coefficients between the variables in the model**

From the variable of	to	Variable of	Value of b	error (S.E)	Critical ratio (C.R)	Significance level p
Psychic power		Experiential intelligence	.714	1.495	.477	.633
Psychic restlessness		Experiential intelligence	-.316	.640	-.493	.622
Activity		Experiential intelligence	-.265	.803	-.330	.741
Sustainability		Experiential intelligence	2.725	.907	3.005	.003
Uniqueness		Experiential intelligence	.848	.811	1.046	.295
Superiority-seeking		Experiential intelligence	.393	.954	.412	.680
Cognitive tenacity		Experiential intelligence	15.399	1.381	11.148	0/001
Emotional motion		Experiential intelligence	-1.681	1.423	-1.181	.238
Cognitive tenacity		Creativity	.099	.030	3.319	0/001
Emotional motion		Creativity	.017	.028	.580	.562
Psychic power		Creativity	.036	.030	1.187	.235
Psychic restlessness		Creativity	.003	.013	.221	.825
Activity		Creativity	.012	.016	.755	.450
Sustainability		Creativity	.079	.019	4.245	0/001
Uniqueness		Creativity	.028	.016	1.726	.084
Superiority-seeking		Creativity	-.025	.019	-1.332	.183
Emotional intelligence		Creativity	.006	.001	4.565	0/001

p < 0.001

As data of table above show, only two coefficients between sustainability and cognitive tenacity and experiential intelligence and creativity are significant. Also, the coefficient of path between experiential intelligence and

creativity is significant. The following table presents the direct, indirect and total general standard coefficients between the constructs. The explained variance of the dependent variables in the model is also presented.

**Table 13: Direct and indirect and total standard effects of main variables of the study**

From construct of	To construct of	Direct effect	Indirect effect	Total effect	Explained variance
Emotional motion	Emotional intelligence	-0.055	No	-0.055	0.55
Superiority-seeking		0.019	No	0.0	
Uniqueness		0.049	No	0.049	
Sustainability		0.136*	No	0.136*	
Activity		-0.015	No	-0.015	
Psychic restlessness		-0.	No	-0.024	
Psychic power		0.023	No	0.023	
Emotional tenacity		0.74**	No	0.74**	
Emotional motion	Creativity	0.033	-0.020	.013	0.53
Superiority-seeking		0.077	0.007	-0.070	
Uniqueness		0.100	0.018	0.118**	
Sustainability		0.242**	0.049**	0.291**	
Activity		0.042	0.005	0.037	
Psychic restlessness		0.013	-0.009	0.004	
Psychic power		0.	0.008	0.	
Cognitive tenacity		0.**	0.268**	0.0**	
Experiential intelligence	Creativity	0.362**	No	0.362**	

\*\*\* p<0.001

Based on the above table data, the direct coefficients between the variables of sustainability and cognitive tenacity and experiential intelligence are significant. Also, the indirect coefficients of these variables on the main dependent variable, namely creativity, through the mediating variable of experiential intelligence are significant. The direct and indirect coefficients of uniqueness on creativity are not significant, but the total standard coefficient of this variable on creativity is significant. In the last column of the table above, the explained variance of endogenous variables of the model based on exogenous variables has been reported. The level of variance explained by the main endogenous variable of the model, namely creativity, through the eight independent variables and the experiential intelligence variable, was 0.53, meaning that about 53% of the variance of the main dependent variable is explained by the model variables and 47% of its variance is explained by the non-model variables. Also, 55% of the variance of the experiential intelligence construct is explained by four variables of emotion of thought and four variables of personality traits. In general, the results of the evaluation of the fitness indices showed that the final model of the research fits well with the collected data and the conceptual model of the research is confirmed. It means that the relationships of these variables can be better investigated through the present research model.

## DISCUSSION AND CONCLUSION

The objective of this study was to investigate the relationship between emotion of thought and personality traits and creativity with the mediating role of experiential intelligence among high school students. According to the data of Table 9, creativity has a positive and significant correlation coefficient with the variable of sustainability ( $r = 0.489$ ). The results are in line with the results of the research conducted by Davari (2018) and Ganji *et al* (2015)<sup>[21, 22]</sup>. Also, creativity showed a positive and significant correlation with the variable of uniqueness ( $r = 0.295$ ). This result is in line with the result of the research conducted by Soriano (1993) and Feist (1999). According to the data of Table 9, creativity showed a positive and significant correlation with the variable of activity ( $r = 0.244$ ). The result is in line with the result of the research conducted by Amabile (1996), Woodman (1981), Kaka Baraei and Afsharnia (2019), and Fouladvand *et al* (2016).

According to the data of Table 9, creativity has a positive and significant correlation with the variable of superiority-seeking ( $r = 0.302$ ). There was also a significant relationship between the superiority-seeking and creativity of the second-grade high school students and the results of the research are in line with the results of the studies conducted by Davari (2018) and Hosseini and Dashti Nejad (2016)<sup>[21, 23]</sup>. According to the data obtained in Table 4-9, creativity has a positive and significant correlation with psychic restlessness ( $r = 0.267$ ). There was a significant relationship between psychic restlessness and creativity in the second-grade high school students and the results are in line with the results of

the research conducted by Davari (2018). Based on the data of Table 8, creativity has a positive and significant correlation with psychic power variable ( $r = 0.349$ ). There was a significant relationship between psychic power and creativity in second-grade high school students. The results are in line with the results of the study conducted by Davari (2018). Based on the data of Table 8, creativity has a positive and significant correlation with emotional motion ( $r = 0.269$ ).

There is a relationship between emotional motion and creativity in second-grade high school students and these results are in line with the results of the studies conducted by Davari (2018) and Kazemi (2017). Based on the data of Table 8, creativity has a positive and significant correlation ( $r = 0.638$ ) with cognitive tenacity and there was a positive and significant correlation between cognitive tenacity and creativity in second-grade high school students and the results are in line with the results of the research conducted by Davari (2018), Kazemi and Ebrahimi (2017). Based on the data of Table 8, creativity has a positive and significant correlation with experiential intelligence ( $r = 0.472$ ). There is also a significant relationship between experiential intelligence and creativity in second-grade high school students. It is the first research on experiential intelligence and other studies only confirm the relationship between general intelligence and creativity, so it is consistent with the results of the research conducted by Sternberg (2011)<sup>[24]</sup>. Thus, one achievement of this group in the psychology literature was revealing the influence of personality traits and emotion of thought on interactive structure-based creativity through experiential intelligence. From an interactive perspective, creativity means the combination and integration of personality (individual readiness), cognitive (thought and experience), emotional, motor and social domains<sup>[12]</sup>. Thus, interactive school of psychology is a new field for conceptualizing and theorizing that will emerge in the near future. Each psychological phenomenon is a coordinated interactive system composed of ability (cognitive, etc., such as intelligence), action, personality, attitude, motivation, and body (biological basis). Nowadays, the validity of psychological studies is in the multi-factor investigation of any phenomenon. As a result, element-based investigations are not fruitful anymore in the realm of psychology and they will bring vague and baseless consequences of its nature. In other words, clarifying the mentioned phenomena depends on their thorough and interactive exploration.

Interactive psychology refers to a set of theoretical foundations and research achievements that merely explore the nature of each psychological phenomenon in an interaction with the psychological system. The psychological system means the coordinated integration of the personal, emotional, cognitive, attitudinal, biological domains. In realm of this system, any phenomenon or psychological concept is identified. These results are in line with the results of the studies conducted in the years of 2017 and 2018 that showed creativity was associated with the emotion of thought<sup>[12, 21]</sup> and the results of the studies conducted by Zental 2000

and Sternberg (2011) on the relationship between intelligence and creativity. The results of the study conducted by Kazemi (2017) showed that in general, the creativity of gifted and talented adolescents, both boys and girls, was positively correlated with all six dynamism components of emotion of thought test, but negatively associated with the four components of the restlessness scale and it is independent of two components of restlessness (circulation of thought and the physical manifestations of thought).

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