

# The Relationship between EQ & Constructive and Non-Constructive Problem Solving Styles among Payame Noor University's students of Abadan in the year 2014

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## Abstract

The objective of the present study is considering the relationship between EQ & constructive and non-constructive problem solving styles among students. The applied methodology is cross-correlation method. The statistical population in this study is all the educational sciences' students of Payame Noor university of Abadan in the year 2014 and the sampling is taken totally randomly and voluntary. Two surveys of EQ which proposed by Siryashring (1988) have used in this study that contain 33 questions. This study will measure 5 components of emotional intelligence: Self-awareness, self-control, self-motivation, social awareness and social skills. In addition the problem solving styles' survey that proposed by Velang (1996) has been applied that has made in two stages and has 24 questions, 12 items measure the problem-oriented style and rest of them measure the excitement-orientation. According to Cronbach's alpha the reliability coefficient of EQ is reported about 0.84. The validity of 0.63 is confirmed in Shirng's test of EQ. reliability coefficient of solving problem style is reported about 87%. Either reliability coefficient or factor content are confirmed by the faculty. Data analysis is done in two level of descriptive statistical (frequencies, percentages mean) and inferential statistics (Pearson correlation, chi-square test). The obtained results of assumptions show that there is no significant relationship between EQ and constructive problem solving; also there is no significant relationship between EQ and non-constructive problem solving. Moreover there is significant relationship between EQ in creative styles, avoidance and style tendencies. Nevertheless there is no relationship between EQ and distress styles. And the confidence style shows an inverse relationship.

**Keywords:** EQ, Constructive problem solving styles, non-constructive problem solving styles

## 1. Instruction

In today's world Traditional theories of intelligence have changed then new theories are substituted regularly. EQ is the latest evolution in the understanding of relationship between thought and emotion. Emotional intelligence resulted in a new theory of emotional process that not only in a specific time brings enjoyment to the person and reduces anxiety but also, there are always in our actions passionately, as well as intangibly, and as the result people have understood the significance of this interaction further more. Before wakmire (1967), no one had proposed a rational discussion of excitement. In all the literature on excitement is said that excitements are complex and their overall effect is unknown. Mansouri has quoted Kanter (2001): We constantly experience kind of excitement, our emotional state differ throughout the day depending on different stimulus that arrive, it is worth mention that we are not aware about details of the way of expressing our excitement. Glemen 1998 in his extraordinary research done in the field of brain and behavior show those factors other than cognitive intelligence involved in the individuals' success. He examined the emotional intelligence to understand how individuals' potential will result in job's development. He knows the theory of emotional intelligence as a functional theory and recently which proposes the emotional readiness that is a learned capability based on a person's emotional intelligence which its outcomes and consequences are clear. The ability to predict the success of living is closely related to EQ, basically high EQ explain Why do some people with average IQ are more successful in social affairs and activities than people with high IQ. Emotional intelligence is the ability to review the own and others' feelings and emotions, distinguish between them and use this information to manage our thoughts and actions. According to Mairosalwy (1990) EQ is awareness of emotions and how they affect people's relationships. Losian (2006) has claimed EQ includes understanding and controlling your emotions. Also Maier (2001) has believed, west culture has two thousand years background of philosophical considerations about the excitement and cognition. In recent years, researchers have paid increasing attention to emotional functions. One of these studies is relationship between problem solving styles and EQ. Problem solving is a cognitive - behavioral and innovative process which routine problems are identified or developed through effective and adaptive strategies.

### 1.1. Statement of the Problem

Emotional intelligence is a popular topic in the study of individual differences in modern psychology, and a large amount of research has been devoted to this field. Austin (2005) studies on emotional intelligence have shown that emotional intelligence is an important factor in determining outcomes in real life. Siarochy (2004) has said, high emotional intelligence and emotional health, mental health, are correlated. Moreover Gelemen has quoted Shot; EQ is inversely related to mental disorders. Furthermore those who are skilled in emotion regulation of their own and others are enabling to protect themselves against stress. Thus fewer depression, hopelessness, and suicide ideation reported in them. Employing the concept of emotional intelligence for the first time returns to 1940s. Thereafter Mayer and Salvoes have described emotional intelligence. Gardner's multiple intelligences model has a pivotal role in development of EQ theory. According to Gardner's theory of multiple intelligences, there are two major intelligence; First- Intrapersonal intelligence and awareness that allows distinction of complex human emotions, Second- Knowledge and awareness in interpersonal relationships that allow to understand others emotions and motivations. Gelemen (1995) Emotional intelligence is a means of better use of intelligence through self-control, passion, perseverance and self-motivation, in his view, emotional intelligence includes social and individual components. The individual components include awareness, self-regulation and motivation and social components include social skills and empathy. Each of these subsets consists of:

- Self-awareness: Consciousness: emotional awareness, accurate self-assessment and self-confidence.
- Self-assessment: Self-control, reliability, diligence and conscientiousness, adaptability and innovation.
- Motivation: Drives progress, commitment, creativity and optimism.
- Empathy: Understanding others, developing others, service orientation, diversity influence and political awareness.
- Social skills: Influence, communication, conflict management, catalyst for change, linking, collaboration, social competence.

Solving problem styles can be considered with EQ. Problem solving process, including some ways in which a person seeking to regulate emotions and thoughts and through them people can lead their behavior and social activities in social environments. Wren has quoted Kampe (2007) in other words the ability of solving problem is an important strategy that enables people to tackle the problems of everyday life and their negative emotional impact, and consequently reduce the psychological stress. In general solving problem can be defined as a diagnostic and applying knowledge and skills that lead to learning the correct responses to different situations. Solving problem is an obvious behavioral- cognitive process that:

1. Provides effective potential responses to difficult situations.
2. Increases the chance of choosing the best response among several alternatives.

People who are able to solve the problems likely to be more successful in coping with a variety of situations. The problems come when we want to reach a goal but it is not possible currently. Kasidy&lange (1996) proposed six types of solving problem:

1. Innovation style (indicating planning and considering various solutions in problematic situations)
2. Confidence style (indicating the belief in one's ability to solve problems)
3. Appealing style (expressing the positive attitude and a willingness to tackle the problems facing them)
4. Helpless style (helplessness of person in problematic position)
5. Avoidance style (reflecting willingness to denying the problems rather than passing them)
6. Controlling style (external and internal controlling in problematic situations).

The first three styles of problem solving styles are constructive and three second styles of problem solving styles are non-constructive. This study investigated how emotional intelligence can be effective in dealing with problems.

### 1.2. Significance of the Study

Emotional intelligence has many applications in life. Emotional intelligence helps people adopt more constructive problem solving styles in critical situation. People can realize and manage their joys and troubles through EQ. One of the important aspects of EQ is the use of it in order to problem solving. Wiaker (2000) has claimed many researchers believe that emotional intelligence is related to coping skills and problem solving styles. Low emotional intelligence would be a risk factor for mental diseases such as depression, suicide and drug abuse. Environmental stress in young people who have low emotional intelligence results in mental disorders and would challenge their adaptability with the environment. Disorders that are more common in young people include mood disorders, anxiety disorders, physical disorders, eating disorders and drug abuse disorders. In addition, young people who have low emotional intelligence would involve problems in education and social functions as well as problems like school failure, expulsion or leaving school, aggressive behavior. Unlike the rational intelligence, emotional intelligence is reversible. People especially young people that are at risk can be trained and save them from falling into the trap of addiction. The

importance of this research is that the family is the first place to teach the emotional skills. This training is through direct speech and behavior of parents with children as well as emulating of children from their parents. These trainings cause to succeed in understanding the feelings of others and empathize with them.

### 1.3. Review of Literature

In a study has done by Zarean, pooramin and Roodsari (2007) the researchers investigated the relationship between EQ and problem solving styles on 69 freshman students of psychology and educational sciences in Tabriz University. Results show that emotional intelligence has positive relationship with the style of problem solving styles, i.e. confidence style and appealing style. Moreover, the two styles of problem solving totally predict 29% of the variance in emotional intelligence. On the other hand there is a negative correlation between emotional intelligence and helplessness and controlling styles. Javid and Zeinai (2007) in an investigation that has done on 40 addicted men that were referred to the Rasht Social Welfare Centre, indicates emotional intelligence has a positive relationship with helpless, avoidance, appealing and controlling styles. And has a significant negative correlation with innovative and confidence style.

In the study of Banisi and Delfan (2010) the relationship between emotional intelligence and problem solving styles and general health was examined on the students of Azad university of District 12. The results show, according to the Pearson correlation coefficient there is a linear correlation between emotional intelligence and solving problem styles. But there is no relationship between emotional intelligence and general health.

In mohammadi, Torabi and Gharaei's (2008) study that has done on 420 high school students, the results indicate there is a positive relationship between emotional intelligence and three styles of effective and ineffective coping and refer to others.

## 2. Hypothesis

The general hypothesis: is there any relationship between emotional intelligence and constructive and unconstructive problem solving styles?

1. Is there any relationship between EQ and helpless style of solving problem style?
2. Is there any relationship between EQ and controlling style of solving problem style?
3. Is there any relationship between EQ and innovative style of solving problem style?
4. Is there any relationship between EQ and confidence style of solving problem style?
5. Is there any relationship between EQ and avoidance style of solving problem style?
6. Is there any relationship between EQ and appealing style of solving problem style?

## 3. Theoretical Framework

The theoretical framework is correlational descriptive, because the correlation between emotional intelligence and constructive and unconstructive problem solving style will be measured.

### - Statistical Population

The statistical population of the study is consisting of 256 students of Educational Science of Payamenoor that participated in summer semester courses in 2011.

### - Sampling

The sample group is 40 students of all the male and female students in educational science major that is taken totally randomly and voluntary.

### - Research Material

Two questioner surveys of EQ which proposed by Siryashring (1988) have used in this study that contain 33 questions and 5 components of EQ have measured. These components include: Self-awareness, self-control, self-motivation, social awareness and social skills.

Mansouri (2001) has reported the reliability coefficient of EQ is reported about 0.84 according to Cronbach's alpha, and the validity of 0.63 is confirmed in Shirng's test of EQ. the researchers of the study have applied problem solving styles' survey that proposed by Velang (1996). The scale of problem solving style has validated by Besharati (2005) and the average correlation coefficients of the material show that the scale is valid. The survey's validity with regard to the reliability of the validity of a study on the validity of the scale was reported 87%. The problem solving styles' survey has made in two stages and has 24 questions, 12 items measure the problem-oriented style and rest of them measure the excitement-oriented and each style has 3 factors through 4 questions: Innovation style 2. Confidence style 3. Appealing style 4. Helpless style 5. Avoidance style 6. Controlling style. Each of these styles that has the highest score would be applied by individuals in facing with everyday problems. It should be noted that helplessness, controlling and avoiding styles are the subsets of unconstructive and excitement-oriented styles.

### - Method of Scoring

Each volunteer receives 6 separate scores that 5 scores are for each component, and 1 score is for total. The scores for each question are given in Table A. If participants choose option A for some questions would take

1 score and if choose E would take 5 scores, in contrast, if the volunteer choose A in questions 31-28-22-18-33-15-14-12-20-1-9 would take 5 scores. The lowest score of the test is 33 and maximum is 165. High scores on this scale indicate greater emotional intelligence.

#### 4. Findings

In this section, the results are as follows:

	Mean	Std. Deviation	N
EQ	109.20	13.533	40
Solving problem skills	3.25	1.808	40
<i>Innovative</i>	6.35	1.902	40
Confidence	5.25	2.394	40
Avoidance	4.55	1.974	40
Appealing	6.88	1.924	40
Helplessness	1.30	1.471	40

Table 1: Statistics of EQ and constructive and unconstructive solving problem styles

##### First hypothesis

- There is a relationship between high EQ and constructive solving problem styles.
- There is no relationship between high EQ and constructive solving problem styles.

		EQ	Innovative style
EQ	Pearson Correlation	1	.227
	Sig. (2-tailed)		.158
	N	40	40
Innovative style	Pearson Correlation	.227	1
	Sig. (2-tailed)	.158	
	N	40	40

Table 2: The relationship between EQ and innovation

Since the Pearson test for innovative style is equal to 0.227 the test value is equal to 0.158, there is a significant and direct relationship between EQ and innovative style.

Confidence style		EQ
EQ	Pearson Correlation	1
	Sig. (2-tailed)	
	N	40
Confidence style	Pearson Correlation	-.189
	Sig. (2-tailed)	.242
	N	40

Table 3: The relationship between EQ and confidence

Since the Pearson test for confidence in problem-solving styles is equal to -0.189 and the test value is equal to 0.242 that is less than 0.5%, there is a significant and reverse relationship between EQ and confidence.

Table4: The relationship between EQ and appealing

		EQ	Appealing
EQ	Pearson Correlation	1	.321*
	Sig. (2-tailed)		.043
	N	40	40
Appealing	Pearson Correlation	.321*	1
	Sig. (2-tailed)	.043	
	N	40	40

Since the Pearson test for appealing style is equal to 0.321 and the test value is equal to 0.043 that is less than 0.5%, there is a significant and direct relationship between EQ and appealing style.

Therefore the first hypothesis is confirmed: There is a relationship between high EQ and constructive solving problem styles.

##### Second hypothesis

- There is a relationship between high EQ and unconstructive solving problem styles.
- There is no relationship between high EQ and unconstructive solving problem styles.

		EQ	Controlling
EQ	Pearson Correlation	1	.041
	Sig. (2-tailed)		.802
	N	40	40
Controlling	Pearson Correlation	.041	1
	Sig. (2-tailed)	.802	
	N	40	40

Table 5: The relationship between EQ and controlling

Since the Pearson test for controlling style is equal to 0.421 and the test value is equal to 0.802 that is more than 0.5%, there is not a significant and direct relationship between EQ and controlling style.

		EQ	Avoidance
EQ	Pearson Correlation	1	.128
	Sig. (2-tailed)		.430
	N	40	40
Avoidance	Pearson Correlation	.128	1
	Sig. (2-tailed)	.430	
	N	40	40

Table 6: The relationship between EQ and avoidance

Since the Pearson test for avoidance style is equal to 0.128 and the test value is equal to 0.430 that is less than 0.5%, there is a significant and direct relationship between EQ and avoidance style.

		EQ	Helplessness
EQ	Pearson Correlation	1	-.071
	Sig. (2-tailed)		.662
	N	40	40
Helplessness	Pearson Correlation	-.071	1
	Sig. (2-tailed)	.662	
	N	40	40

Table7: The relationship between EQ and helplessness

Since the Pearson test for helplessness style is equal to -0.071 and the test value is equal to 0.662 that is more than 0.5%, there is not a significant and direct relationship between EQ and avoidance style.

Therefore the second hypothesis is confirmed: There is no relationship between high EQ and unconstructive solving problem styles.

## 5. Conclusion

According to the tables and hypotheses have been proposed the results are as follow:

There is a positive and significant relationship between EQ and constructive solving- problem styles and there is not any significant relationship between unconstructive solving problem styles. There is a positive and significant relationship between EQ and helplessness and controlling problem solving styles. There is a positive and significant relationship between EQ and innovative problem solving style and there is inverse relationship between EQ and confidence problem solving style. in addition there is a positive relationship between EQ and avoidance problem solving style and there is a positive and significant relationship between EQ and appealing problem solving style.

The results indicate individuals who have high EQ applying more constructive problem solving styles. But there is no significant correlation between EQ and unconstructive problem solving styles.

### 5.1. Suggestions

Since emotional intelligence and solving problem styles are fluctuating, they would be taught to people to use them in critical situations of their life. Holding some class is to teach different methods in order to improve EQ and constructive problem solving styles would prevented of addiction, suicide, and many other problems. This study shows many individuals despite of high EQ, sometimes apply unconstructive problem solving styles like avoidance that may have sociological origins.

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