

## The relationship between emotional intelligence and thinking styles among female high school students

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### Abstract

Present study aimed to investigate the relationship between emotional intelligence and thinking styles in a correlation research. The statistical universe was composed of all the female students of district 13 of Tehran. The sampling method was cluster sampling. The sample was composed of 200 students. Paul emotional intelligence questionnaire and The Sternberg and Wagner questionnaire were used. The data was analyzed with SPSS software. Then, it was studied under chi square and Pearson Correlation Coefficient. Results indicate that emotional intelligence is positively related to legislative and internal thinking style and was negatively related to judicative, executive and external thinking styles. Difference is significant in five styles. People with different thinking styles tend to use their abilities in different ways. Having an understanding of thinking styles helps to realize why some activities suit him or her well. Therefore, recognizing and examining these factors could be really effective on improvement of occupational performance and educational development.

**Keywords :** Emotional intelligence, Thinking styles and Female students.

### Introduction

Emotional intelligence is a form of social intelligence and a good predictor of individual's efficiency. It allows an individual to control his or her feelings and emotions and also conducts other people. Besides, thinking styles and performance are effective in controlling. Emotional intelligence represents a collection of abilities and thinking styles represent priorities. Abilities are of considerable importance in one's success but are not the only factors for individuals thinking style (which means how individuals would rather to think) could be as important as how good they think. Emotions affect our life and give it spirit (Goleman, 1998). From the 1920 to

1990, there search interest in emotional intelligence has undergone a lot of changes and various ideas have been developed which defined emotional intelligence as the ability to interact with other people, interpersonal knowledge, the ability to judge correctly about the emotions, moods and other people's motivations, effective social performance, empathy, and the ability to decode nonverbal symbols (Sternberg and Smith, 1985). Strenberg (1997) defines the various styles of information processing as cognitive styles.

Thinking style is a way of employing the personal skills. He divides thinking styles into 5 groups including legislative, judicative, executive,

introspective and extratensive. Strenberg showed that there is a correlation between executive and judicative thinking styles and creative thinking, while there is a negative correlation between executive style and creative thinking. Strenberg *et al.* (2005) in a research work titled 'Intelligence, race, and genetics' (conducted on 199 American students) conclude that the correlation between legislative thinking style and creative one is 0.19 while executive and creative thinking styles have inverse relation where their correlation is -0.16.

Emamipoor and Seif (2001) argue there is a relationship between the legislative thinking style and individual creativity which leads to improvements in the person. Since different activities with a person require different thinking styles which give rise to better or worse performance in educational and professional periods of one's life, recognizing the styles in a person seems to be necessary. Their sample includes 500 students. Also, their results indicate that there is a positive relationship between extratensive thinking style and creativity, while introspective thinking style has an inverse relationship with creativity.

In another study, Tahami (2001) studies emotional intelligence and coping strategies filed on 50 intelligent students where the results indicate a positive correlation between emotional intelligence and problem-based coping method. Also, Mahdavi Rad (2002) investigates on the relationship between creativity and thinking styles among 200 high school students and argues that creative individuals obtain a high score at legislative and judicative thinking styles and the people with executive thought have lower creativity.

Furthermore, Besharat (2006) studies the Impact of Emotional Intelligence on the Quality of Social Relationships and concludes that low emotional

intelligence results in some problems associated with strictness, sociability, intimacy and accountability. As a result, emotional intelligence can be a suitable predictor for interpersonal problems.

Emotional intelligence is a kind of non-cognitive intelligence which includes social abilities and skills. Such abilities are important in a person's success but are not the sole effective factor. Consequently, present work aimed to determine the relationship between emotional intelligence and thinking style which helps a person to understand him / herself, control the emotions and manage the relationships with other people and finally leads to individual growth and progress. The theory of this research states that there is a relationship between emotional intelligence and thinking style.

### Materials and Methods

The statistical universe was composed of all the high school level students of district 13 of Tehran. Two hundred subjects were chosen by cluster sampling. Among different Tehran districts, district 13 was selected randomly where two girls high schools were chosen. All students studying grades 2 and 3 constituted our sample. After a description of research objectives and attracting subjects' participation and correlation, Paul's emotional intelligence scale and Strenberg- Wagner thinking style scale was filled with them. Research tools included two questionnaires: emotional intelligence scale and Strenberg- Wagner thinking style inventory.

The research type was correlational Chi square and Pearson Correlation Coefficient was used as the direction of the data analysis. The scale of emotional intelligence was a twenty items test and the answers were composed of two alternatives which the subjects should choose one which was developed by Paul (2000).

Extrastensive individuals are often sociable and try to work with others as much as possible and perform more successful in group activities (Hijazi, 2009). The Sternberg inventory has 40 questions. Sternberg *et al.* (2005) has conducted a complete study in concerned with the validity and justifiability of thinking style inventory (the inventory has a validity coefficient of 78%).

### Results and Discussion

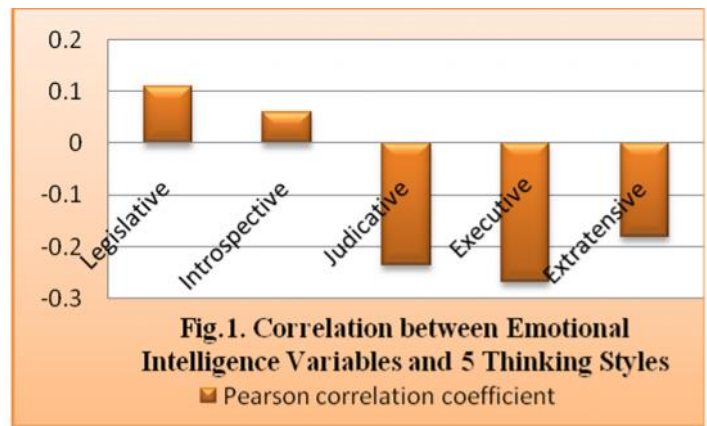
Table -1 presents the subjects' mean and standard deviation in emotional intelligence and thinking styles variables. The mean score acquired by all 200 subjects in emotional intelligence variable was 7.34. In addition, frequency distribution of subjects in emotional intelligence variables and five thinking styles are presented in Table - 2. As it can be seen, 73% of subjects have obtained a score lower than the emotional intelligence mean score. Furthermore, scores higher than mean had the highest percentage in legislative thinking style by a total of 81.5 % and the lowest was for executive one. In Table 3, Chi square test and Pearson Correlation Coefficient were used. Given Pearson Correlation Coefficient, all 5 thinking styles were correlated with emotional intelligence which was significant with  $p < 0.01$ . It is also worth mentioning that the correlation between legislative thinking style and emotional intelligence was positive which means that the subjects with higher emotional intelligence had legislative thinking style ( $p < 0.01$ ,  $r = 0.11$ ). Also, such a correlation was existed about introspective thinking style where the correlation between emotional intelligence and the thinking style was positive –i.e. the people with introspective thinking style have higher emotional intelligence ( $p < 0.01$ ,  $r = 0.059$ ). This is while the correlation between judicative thinking style and emotional intelligence was negative, in fact, the subjects with judicative thinking

style obtained lower scores in emotional intelligence variable ( $p < 0.01$ ,  $r = -0.235$ ). Besides, the scores related to correlation coefficient of emotional intelligence variable and executive thinking style are shown in the Table 2. Such a correlation was also negative which means that the subjects with lower scores in emotional intelligence have higher scores in executive thinking style ( $p < 0.01$ ,  $r = 0.267$ ) and ultimately it can be seen that the correlation between extrastensive thinking style and emotional intelligence is negative, as well. The subjects with higher scores in extrastensive thinking style had acquired lower scores in terms of emotional intelligence variable ( $p < 0.01$ ,  $r = -0.181$ ). In order to have a better vision, correlation results between emotional intelligence and all 5 thinking styles are shown well in the diagram. The correlation between emotional intelligence and legislative and introspective thinking styles and the correlation between emotional intelligence and judicative, executive and extrastensive thinking styles was negative.

Theorists believe that emotional intelligence predicts one's future. Goleman believes that cognitive intelligence only predicts twenty percent of one's future and the rest eighty percent relates to emotional intelligence (Goleman, 2000). On the other hand, Sternberg states that if we are considering one's progress we have to consider thinking styles. Successful people are the ones whose thinking style fits their abilities. For example a creative person has a legislative style (Strenberg, 1994). Strenberg (1994) believes that the congruence between thinking styles and abilities creates an increasing force which affects the quality and joy of one's job. Furthermore, Bar-on reveals that the basic features of emotional intelligence which they name personality factors, predicts the progress of a person in all the aspects and this could present a kind of relationship between thinking style and emotional intelligence (Homan, 2001; Bar-on, 2000).

**Table -1. Core indicators of subjects in emotional intelligence variables and thinking styles**

Variable	Mean	Standard Deviation
Emotional Intelligence	7.34	2.19
Legislative Thinking style	5.3	1.15
Introspective Thinking Style	4.96	1.11
Judicative thinking style	4.86	1.01
Executive thinking style	5.20	1.19
Extratensive thinking style	34.65	6.35



**Table -2. Frequency distribution for emotional intelligence variables and 5 thinking styles**

Variable	N	Frequency of scores higher than mean	Frequency percentage	Frequency of scores lower than mean	Frequency percentage
Emotional intelligence	200	54	27%	146	73%
Legislative thinking style	200	163	81.5%	37	18.5%
Introspective thinking style	200	157	78.5%	43	21.5%
Judicative thinking style	200	158	79%	42	21%
Executive thinking style	200	152	76%	48	24%
Extratensive thinking style	200	159	79.5%	41	20.5%

**Table – 3. The tests to study correlation between emotional intelligence variables and thinking styles among students**

Variables	N	Chi Square test	Df	P	Pearson correlation coefficient	P
EI* and Legislative thinking style	200	52.343	6	0.001	0.11	0.001
EI* and Introspective thinking style	200	76.68	6	0.001	0.059	0.001
EI* and Judicative thinking style	200	200	33.94	0.001	-0.235	0.001
EI* and Executive thinking style	200	45.20	6	0.001	-0.267	0.001
EI* and Extratensive thinking style	200	21.55	6	0.001	-0.181	0.001

\*Emotional Intelligence

Our results were in line with this finding. This study indicates that 5 thinking styles (i.e. Legislative, Judicative, Executive, Introspective and Extratensive) were correlated with emotional intelligence in students. The main finding addresses the people with higher emotional intelligence mostly use legislative and Introspective thinking styles. A person with legislative thinking style tends to create, invent and design and

does tasks by his/her own method. Strenberg (1997), Emamipoor (2001) and Mahadavi Rad (2002) are in parallel with this finding. They declare that creative people use legislative and extratensive thinking styles. Also, people with introspective thinking style do enjoy from doing the tasks to be done independently and schedule the assignments as they prefer. Such people concentrate on their world and rely on themselves.



Another finding indicated that emotional intelligence has inverse legislative, executive and extratensive thinking styles. This means that the people with lower emotional intelligence tend to use legislative thinking style and a person with legislative thinking style tends to judge and evaluate rules and plans. Such people prefer to do the tasks in which opinions and affairs are evaluated. Writing censurable papers, presenting opinions and judgments on people and their work, and evaluating programs are preferred by such people.

However, extratensive people mostly tend to outside environment. The people with extratensive thinking style would rather the assignments which gives them required opportunity to interact with others. In contrast, the ones with executive thinking styles are interested to follow commands and do what they hear. This can be in line with Strenberg *et al.* (2005). These can be briefly in such a comment that a person with a high emotional intelligence who uses legislative and introverted styles would be successful while a person with a lower emotional intelligence and executive, judicative or extroverted style could work better and make advancements in his job.

### Conclusion

Life successes need a consistency between thinking styles and capabilities which interact with each other. 'Style' expression means a method to hire individual ability, therefore recognition of the styles and its relation to individual abilities can play an important role in educational and occupational success. The intelligent people are the persons whose thinking styles are consistent with their ability pattern, thereby recognition of these styles and studying the relationships between these variables seem to be necessary.

We suggest considering the other cognitive styles in other samples so that each individual could choose his activities according to his or her abilities to

guarantee his or his educational and professional success.

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