



# The Study of Emotional Intelligence and Academic Achievement of High School Students' in Vadodara City

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## **Abstract**

The purpose of the present study is to investigate the relationship between academic achievement and components of emotional intelligence of students of high schools of Vadodara city. The research method was descriptive. The sample consisted of about 280 subjects, 100 girls and 180 boys students. The collected data were analyzed using T-Student test and Pearson correlation. The results show that there is a significant relationship between the main components of emotional intelligence including self-motivation, self-awareness, self-regulation, social consciousness, social skills and students' academics. There is a meaningful difference in achievement as well as emotional intelligence of male and female students.

**Keywords:** Study Habits, Emotional Intelligence, Academic Performance, Secondary school students.

## **1. Introduction**

During the past few years, psychologists have asked the question "Who will succeed in education?" Trying to find answers to questions like Why do some people, despite having high intelligence quotients in education and in post-educational processes, fail miserably? "What role does intelligence co-efficient play in student success, particularly in academics?" Are factors other than intelligence effective in academic success? "Scientists have conducted research that has drastically changed the traditional view of Intelligence Quotient (IQ)1 and its effects on human life.

Research conducted on 95% of Harvard University students during the 1940s in their middle ages, it was proven that the most intelligent students compared to the average students in those years were not very successful and were of low status as far as income and competence were concerned. Also, they did not have much success in life and reactions with people around them. Karen Arnold, a professor at Boston University who has done a lot of research on intelligent students, believes that by looking for one's intelligence, it is possible to find only conscientious people, which means those who know how to get. Good grades in the educational system, but a person's intelligence does not provide any information on how they work through the ups and downs of their lives because academic intelligence and credit do not bring individuals any skills to cope with disasters to take advantage of the educational environment, life and desired opportunities.

(Noori, 2003).

Teaching including emotional intelligence or the seven intelligences

1- Vocal Intelligence: Speaking

2- Logical Intelligence: Mathematics

3- Spatial Intelligence: Visual

4- Movement Intelligence: Physical

5- Musical intelligence

6- Interpersonal intelligence

7- Interpersonal intelligence

These instructions are very important in school and can guarantee one's success in both the short and long term. Term when a child suffers from chronic anxiety or anger, he/she cannot believe and act upon imposed thoughts. Free him self or herself from the problems that are bothering him or her. So, when the mind is too busy with this Academic thoughts, chances of learning new things will be less. Research has shown it to be successful Schools are those that create the right relationship between students, between students and teachers, School students and other employees. In such schools, the teacher tries to create the desired relationship and interaction between students. Educational programs including emotional skills help students manage their emotions and emotions and they strengthen their self-esteem and they will also cause them to get better grades in class Cognitive learning.

Klumper (2008) present instruments for measuring emotional intelligence and believe that based on a standardized measurement of emotional intelligence, it is possible to increase the validity and accuracy of the use of emotional intelligence during the school years. By encouraging children to cultivate all their talents and abilities that will help them achieve success practically or carry out their tasks, schools will turn into centers for cultivating life skills. The most important service that education can do to help the development of a child is to guide him in the best direction and it seems that this goal is being neglected in our country's educational system and less time is being spent on classifying children. And more time is spent and more time is devoted to showing their natural abilities and talents; This is happening while there are countless ways to achieve success. There are also many Abilities that play their role in achieving success. In this direction, teachers and parents should keep in mind that cognitive intelligence IQ alone is not effective in the academic progress of students; However, there are other factors such as emotional intelligence, adaptation to educational environment and gender that are influential in their academic progress that should also be addressed.

## 2. Review Of Literature

Many experts (Gardner<sup>4</sup>, 2000; Goleman, 1998; Barr-on & Parker<sup>5</sup>, 2000; Javadi, 2004) have done a lot of studies and researches about emotional intelligence and have presented its results in popular articles and magazines in the forms of reports about the activities done in the field of emotional intelligence. This matter incites the importance of emotional intelligence in today's world. On the other hand, the existence of different people interested in this subject has led to the emergence of different functional definitions for emotional intelligence variety of measuring tools and claims based on the importance of this subject. The concepts of emotional intelligence as a very important one in the academic community (Mayer, Salovey; Salovey and Mayer, 1990) and also in non-academic community (Goleman 1995 and 1998) have been paid attention to. (Ciarrochi, Forgas & Mayer<sup>6</sup> 2001) quoted by Noori and Nasiri (2004), Many experts (Gardner, 2000; Goleman, 1998; Bar-on and Parker, 2000, Brobery & Giouz quoted by Ganji 2005) have given different definitions in connected with emotional intelligence which we will study the most important ones:

- Emotional intelligence is a combination of interpersonal intelligence and interpersonal intelligence (Gardner, 2000).

- Goleman (1998) considers emotional intelligence to be a general structure than can be the reason for the individuals' success in different aspects of life. Goleman states that those individuals who, somehow, control their emotions and interact with other people more effectively; they have a more meaningful life. Also happy people have more talent in getting information and are enjoying life more than those who are worried.

Bribery quoting Ganji (2005) refers to the main components of emotional intelligence under the title of self-awareness, self-control and self-motivation.

Bradbury et al., (2006) defines emotional intelligence as ability, talent, recognition skill, assessment and self control of emotions in the interaction with others. Barr-on and Parker (2000) have considered emotional intelligence as a kind of intelligence that is resulted from emotions and reflections and it means reaching the general structure of emotional, personal and social capabilities which are necessary in order to cope with the demands, tolerance and adaptation to the environment (quoted from Hajloo, 2004). In the studies conducted about the history of the emotional intelligence, it is said that the philosophical analysis of the relation between thought and emotion in the west's culture goes back to 2000 years ago (Mayer, 2001) till the decade of 1990's, research about social intelligence has been subjected to change and different outlooks have come into existence (Barr-on, 2000). The concept of emotional intelligence has its roots in the theories of intelligence that go back to the twentieth century. Sorandic, for the very first time considered social ability as an important part of intelligence. Gardner, also, in his mind talked about interpersonal intelligence which is the ability of understanding something else. (Hakim Javadi Vazheeh, 2004). On the other hand, Mary and Salovey (1990) were the first who Officially used emotional intelligence as a block of the social intelligence. At first' this view considered the

Emotional intelligence has three components: Go back to the twentieth century. Sorandic, for the very first time social competence is considered as an important component Intelligence Gardner also talked about interpersonal intelligence in his own mind which is the ability to understand something else. (Hakim Javadi Wazehi, 2004). On the other hand, Mary and Salovey (1990) were the first Officially uses emotional intelligence as a block of social intelligence. Initially' this view is considered. There are three components of emotional intelligence:

1- Assessment and expression of emotions in himself/herself or others

2- Regulation of emotions in himself/herself and others.

3- The application of emotions for facilitating thoughts Mayer's researches (2001 quoted by Noori and Nasiri 2004) are about measures that have been done in the field of psychology since 1990 and it includes 5 periods.

1) The years of 1900 to 1969

2) From 1970 to 1989 during which the focus of psychology was on were effective

3) From 1990 to 1993 during which the emergence of EI (emotional intelligence) was studied as a subject

4) From 1994 to 1997 during which this concept became common

5) The present time which was the time of beginning and defining researches in this field?

Taking into account the impact of emotional intelligence on the success of individuals, different experts and cited by researchers (Shamoradloo, 2004; Javid, 2002; Barr-on, 1997; Goleman, 1998; Mayer and Carsoy 2002 Ebrahimi, 2004; Dahshiri, 2003; Barr-on and Parker, 2000; and Kesler, 1943 cited by Nikobin, 2004; Goleman, 1998; Petricles and Furunham, 2002; Akhoondi, 1997, presented several views which we will point out the most important ones.

Barr-on (2000) in his emotional pattern does not only study the interpersonal relationships with himself and others. He also considers factors such as compromise, dealing with anxiety and public attitude as the ones that form emotional intelligence and considers emotional intelligence as a form of intelligence that are formed from thoughts and emotions and it means studying the general structure of personal and social emotional ability which will have an impact on the ability or the talent of confronting the environmental demands and pressure.

He also states that emotional intelligence and skills grow and change over the years and they can be improved by teaching improvement programs such as therapeutic clinics (Bron and Parker, 2000).

- Vexler (1943) in his report about emotional intelligence writes", I have tried to show that in addition to intelligence factors, special non-intelligence factors exist too which can clarify the behavior of intelligent people." He sought to compare the cognitive and non-cognitive aspects of public intelligence. His attempt can be realized by his use of small test for the regulation of pictures and understanding which form two major segments of his test. Understanding (Vexter quoted by Nikoobin, 2004).

The level of emotional intelligence from the point of view of inheritance is not permanent and it does not only form during childhood. Contrary to the public intelligence that has very little changes after adolescence, emotional intelligence up to a very high degree will be learned and during life will take shape by learning experiences. The individual's merit in emotional intelligence is growing.

Research analyzing levels of emotional intelligence throughout life suggests that people become more competent in their abilities and acquire greater skills in managing their emotions. Meyer and Salovey's analysis

Hundreds of adults and teenagers have suggested that adults are better at emotional intelligence than other skills Meyer states that emotional intelligence increases with age and experience from childhood to adulthood (Goleman). Emotions and emotional experiences will provide information for individuals

and their environment such that they will interact and be compatible with each other. The pure and basic feelings towards complex emotions from all kinds of emotional experiences are the result of intelligence. meanings (Kennedy 10 , Eileen 11 and Watson 12 , 1993). In addition to emotional intelligence and cognitive intelligence, social tolerance is also important in job success and academic progress. Social tolerance is positively correlated with academic achievement (Khaltabari, cited by Akhundi, 1997). Although social learning skills begin at home, from the time children arrive at school, they are exposed to situations of crisis and different emotions. Schools address the challenges of teaching and improving and building emotional skills. By adding information to and structuring the standards of children's academic programs, these challenges school conditions encourage the development and management of emotional skills (Chiarochi, Forgas, and Mayer 2001). cited by Noori and Nasiri 2004). Mayer and Salovey 13(2008) which will provide literature support for emotional intelligence leading to its successful application in various fields.

John Dewey had deep thoughts about classroom activities and believed that the classroom was a place where students had to learn democracy. It requires skills to protect it and social and emotional conditions to transfer it (same

source). Bar-On (2000) believes that effective efforts have been made to take care of students emotionally and physically. Social needs can improve their academic performance. Today's educational system is based on the general intelligence grades of students from kindergarten to university. Proponents of the traditional view are still trying to maintain this stance. Countering this view, many researchers, educators, and parents have claimed that such tests for assessing students are flawed. Recently, a new view of learning and intelligence has made instructors/coaches and planners to preview their educational methods which is a similar multifaceted view.

Teaching social and emotional skills in school is very long-term (Elias & Tobias<sup>14</sup>, 1996). Many experts (Dabravskimak<sup>15</sup>, 2001; Peterson<sup>16</sup> and Cangelosi<sup>17</sup>, 1998; Goleman, 1995; Duke and Nbvcki<sup>18</sup>, 2000; Erickson, 1994; Mehrabian, 2002) have conducted many researches regarding the effect of emotional



intelligence on people's personal academic progress and some of them under According to: Dabravskimak (2001), based on the research he conducted on 39 intelligent teenagers, came to the conclusion that emotional intelligence does not help these individuals achieve social and academic success. A study conducted on questionnaires found that students who have high emotional intelligence at school, at home, in relationships with their friends and at work are more likely to fail than those with low emotional intelligence.

In a test conducted by Nbwiki and Duck (1989) on a pool of 1101 children, those individuals who had high talent in understanding the non-verbal emotions of others were among the most popular students in school and

Emotionally speaking, they were more stable (quoted by Parsa, 2003). Watkin19 (2000) in his research on the impact of emotional intelligence on professional advancement realized that the use of emotional intelligence will lead to advancement and improvement in job related decision making process and emotional intelligence also has a direct impact on the efficiency rate and success of individuals. Vernon et al., (2008) during a comprehensive study conducted on the behavior of individuals according to the emotional model of intelligence confirmed the significant impact on the academic progress of students. Salovey et al. (2002) studied the relationship between emotional intelligence and coping with stress in students and found that there is a significant positive relationship between understanding emotional intelligence and interpersonal performance and psychological performance. Based on the top facts and confirming the need and importance of research on emotional intelligence and its relationship with academic performance of high school students, the present research is the determination of the main components of emotional intelligence and the rate of difference between male and female students in emotional intelligence and the determination of emotional intelligence at different time high school levels.

### 3. Method of Research

This research is descriptive and of predictive type. The statistical pool of the research includes male and female students in senior high level in public schools in the city of Vadodara during the academic year of 2021-2022. The statistical samples were selected based on Gorjesy and Morgan chart, 290 individuals were selected. The sampling method is relative classification and simple random. The measuring tool in this research was standard Cyber Sharing emotional intelligence questionnaire which has 32  $\Delta_j \pm$  having 5 emotional intelligence components based on Likert standards. The score of 5 is given to A and the score of 1 is given to choice number 5 (Mansoori, 2001). Cyber or Sharing questionnaire has been confirmed.

### 4. Research findings

First question: What are the key components of emotional intelligence? To answer this question, the basic principles of the researches were precisely studied in India and abroad and due to the standardized measurement tools. Which were key components of emotional intelligence and were confirmed in various statistical bridges. Current research, major components of emotional research are categorized based on cyber sharing Self motivation, self awareness, self control, social awareness and social skills. Another question: Is there a relationship between students' emotional intelligence and their academic progress? To answer this question, the total score of the questionnaire was chosen as the emotional intelligence score and The correlation of students' GPA with their Academic Progress Score and Pearson's coefficient at the end of the academic year (2020-2021) is presented in the chart below:

Table 1: Coefficient Correlation of Emotional Intelligence and Academic Achievement

Coefficient Correlation	Significant Level
0.833	0.00

As shown in the following chart, the correlation coefficient was significant.

Table 2: t-test to analyze the significance in the correlation between emotional intelligence and academic achievement

T Chart	Freedom Level	Observed T	P
2.33	279	3.89	0.01

Based on the data in the top chart, first the coefficient correlation between the scores of emotional intelligence and Academic progress was calculated which was ( $r=0.881$ ). The significance of the co efficiency was analyzed using the t test which has a positive correlation of 99% accuracy. Third question: Is there a difference between girls' and boys' emotional intelligence? To answer this question, first, we calculated the mean score of the boy's girls' emotional intelligence separately and Then we used the t parametric test for the significant change between the means which is explained as follows:

Table 3: Descriptive Statistics of Academic Achievement

Gender	BOYS	GIRLS	TOTAL
N	180	100	280
Minimum	72	75	72
Maximum	143	73	143
Scope	71	49	71
Mode	97.2	56.11	-
Avrange	105	77	102
Mean	104.18	101.42	102.87
Standard deviation	11.476	10.669	11.172
Varaince	13.703	113.82	124.8

Taking into account the data of the top chart, it is argued that the boys emotional intelligence mean (104.18) with the standard deviation of (11.476) compared to the girls' emotional intelligence with the mean of (101.42) and the standard deviation of (113.821) to be more. On the other hand, the scope of changes in the male students' emotional intelligence (71) was more than the scope of female students' emotional intelligence (49) and the male students' grade distribution was between 72 and 143 and for female students it was between 75 and 124. These data indicate that compared to female students, the male students' emotional intelligence were higher. To determine the significance of this change, the t test as described in the following chart was used:

T Chart	Freedom Level	Observed T	P
2.42	279	2.33	0.05

Taking into account the data in the top chart with the accuracy of 95%, we can argue that there is a difference between the means of male and female students' emotional intelligence.

## 5. Discussion and Conclusion

In response to the first question of the main component of intelligence which included self-motivation, self-awareness, self-control, social awareness and social skills, this finding conforms with the classification of Mayer, Salovay (1990), Ganji (2005), Goleman (1998) and Renon (2008). In response to the second question, the current research's finding indicated that with an accuracy of 99%, we can conclude that there is a positive correlation between emotional intelligence and academic progress. The findings of the current research are harmonious with the

researches conducted by Amanda Swart quoted by Barr-on, 1997; Richardson and Ivaz quoted by Dehshiri, 2003; Peterson, 1998; Zare, quoted from Dahshiri, 1993; Mansoori, 2001; watkin, 2000. Based on the

researches that have been conducted about emotional intelligence and academic progress, we can point out the following information. More than 100 years have passed since cognitive tests have been used and yet only 20% of the occupational success can be predicted by taking advantage of intelligence quotient (IQ): Emotional skills can have long term effect on the academic success (Elias et al quoted from Bar-on 1997). The finding of the current research in answering the 3rd question indicates that with an accuracy of 95%, it can be argued that there is a significant difference between the means of boys and girls emotional intelligence. The researchers Barr-on (2000) and Yong (2003) claim that there is no difference between the emotional intelligence of both genders. Also, the influence of gender on the scores of emotional intelligence indicated that there is no significant difference in the total score of boys and girls emotional intelligence. The findings of the current research do not conform to Zare's research. Mansoori's research (2001) indicated that the total score of the test for both genders were different; therefore his claim conforms to the findings of the research. Javid (2002) claims that girls have a higher emotional intelligence than boys. However, the new research considers the difference in the total score to be in the boys' favor.

Based on the findings of the current research and its comparison with the findings of other researchers, the board of

### **Education authorities are recommended:**

- 1) Since emotional intelligence has a considerable effect on the students' academic progress, its main components include self-motivation, self-awareness, self-control, social awareness and social skills in the students' curriculum so that they can learn these skills and use them in their daily lives.
- 2) Based on the first recommendation, it seems that offering educational programs such as training workshops in teaching the components of emotional intelligence to be necessary and the teachers should be asked to teach them to the students in a group among other teaching materials.
- 3) In teaching these concepts, female students should be paid more attention than male students. On the other hand the other researchers are recommended to conduct this research in other statistics pools and other educational periods (elementary, intermediate schools and universities and they should, especially, compare the difference in the means of boys and girls emotional intelligence.

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