



## Emotional Intelligence and Academic Achievement of Higher Secondary School Students

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### Abstract:

*The main purpose of this study was to study the emotional intelligence and academic achievement of higher secondary school students of Anand district on the basis of gender. The sample for this study was 200 higher secondary school students (boys=100, girls=100), for the measurement of emotional intelligence Prof. P.P.Patel scale was administered and for academic achievement first semester examination results of the classes of the sample subjects were taken as their academic achievement. Descriptive statistics, Pearson's product moment correlation and were used to analyze the data and t-test. There is positive significant correlation between emotional intelligence of higher secondary school students and their academic achievement. The research showed that emotional intelligence is meaningful associated with gender differences.*

**Keywords:** *Academic Achievement, Emotional Intelligence, Gender*

### 1. Introduction

It is necessary to collect information about outcomes of every educational system and its effective factors for promoting educational quality. Evaluation of the important educational aspects is a basis for valuating educational institutes (Leenaars and Laster, 2006). Educational achievement evaluation can be considered as one of the most important educational evaluations. Continuous evaluation of the students' educational achievement during their academic period and examining its effective factors is one of the critical and inevitable bases of educational system improvement especially in the universities. It plays an important role in developing better educational plans, prompting educational quality, and finally correcting and improving academic managers' efficiency (Bakhtiarpor, 2009). Steinberg and Merriam (1993) "Achievement encompasses student ability and performance; it is multidimensional; it is intricately related to human growth and cognitive, emotional, social, and physical development; it reflects the whole child; it is not related to a single instance, but occurs across time and levels, through a student's life in public school and on into post secondary years and working life."

Students' academic performance in different fields, levels, and universities is influenced by several personal and educational factors. Determining appropriate criteria and factors is one of the potential research areas. Furnham, Chamorro, and Premuzic (2004), Gange and St Pere (2002), Lubinski (2004), Vigil-Colet and Morales-Vives (2005) are the authors who are active in this field. The scores of intelligence and academic achievement are one of the important measures that have been used as indicators for predicting students' future conditions by several authors (Gange and St Pere, 2002).

Intelligence is one of the main characteristics that results in individual differences among peoples. This has been attended by humans from many years ago (Bakhtiarpor, 2009). Although study about intelligence has focused on its cognitive aspects such as memory, problem-solving, and thought, but nowadays its non-cognitive aspects such as emotional, social, and spiritual ability have been attended by authors. On the other hand, it can be used for predicting individual abilities for success and compatibility in the life (Heien, 2007).

The role of intelligence tests in predicting academic performance that the effective psychosocial and mental sources has an important role in predicting academic achievement especially in the higher academic levels (Furnham, Chamorro, and Premuzic, 2004).

Wiggles Worth (2004) introduced four types of intelligence including physical, cognitive, emotional, and spiritual intelligences. He believes that the child find control on his body in the beginning of his life. In other words, first concentration of mankind is his physical intelligence and then his linguistic and perceptual skills will be developed. Intelligence quotient refers to the analysis capability that can be used in many educational activities. When an individual seeks to develop his/her relationship with others, emotional intelligence will be introduced (Golman, 2000). With regard to the emotions and their appropriate application in the human relations, some issues have been introduced as emotional intelligence such as understanding self and others' personality, continence and domination on the immediate expectations, empathy, positive use of the emotions in thoughts and cognition (Kooker, Shoultz, and Codier, 2007).Snarey and Vaillant, (1985) further suggested that the key skills and qualities needed to be successful came from within which is emotional rather than from cognitive intelligences and that emotional intelligence plays a key role in determining life success as people progress up the career ladder of their life (Kolb & Hanley-Maxwell, 2003; Richburg & Fletcher, 2002). These assertions explain why a person with these abilities is considered to be well adjusted and emotionally skilled; the lack of which renders an individual socially and emotionally handicapped. Nasir and Masur (2010) asserted that effective learning takes place when students have an understanding of how to learn and this understanding requires such emotional skills as confidence, self-control, the ability to communicate and cooperate with others, hence the conduct of this study to find out whether emotional intelligence influenced Anand district higher secondary school students' academic achievement.

Researches in these areas are widespread. Samari et al (2007) found that emotional intelligence has a positive correlation with academic success of students. Investigating the emotional intelligence and its relationship with academic achievement in urban and rural girls in Qeshm city having 11 years age range showed that emotional intelligence is positively related to educational attainment. The result of the study by Nofersty and Moein o lghorabayi, (2010) confirms the significant positive relationship between emotional intelligence and creativity. Many experts emphasize that the relationship between emotional intelligence variables and academic achievements in different age groups and both sexes have a close relationship. Niaz and Saud (2008) showed that there was a significant positive relationship between creativity and academic achievement. James Kristid worked on 235 freshmen to study the correlation between emotional intelligence and academic achievement. The results showed that there is a small correlation between emotional intelligence and academic achievement. Jiun Song et al (2009) showed that in Shanghai university students, after controlling the mental abilities, it is the emotional intelligence that effect on academic performance. Another study that was conducted on academic achievement in America showed that while the family has a great impact on students' achievement, it cannot demonstrate the gap between academic achievements in America compared with other developed countries. According to extensive studies concerning the behavior of an individual based on emotional intelligence it was determined that emotional intelligence has a significant effect on academic achievement. Baharat (2011) in an experiment found that there is a significant difference between the mean emotional intelligence score in rural and urban adolescents. He also adds that gender has no significant effect on emotional intelligence.

Gender differences in emotion regulation, although small on average, have been reported. Compared to boys, girls use more emotion regulation strategies Gornefski (2004), Kafetsios (2010), express their emotions more often Kring & Mallinckrodt (1994) and experience their emotions more intensely studies in the identification and role of emotional Gross and John (1998).

## 2. Hypotheses

- H<sub>1</sub>:** There is a significant positive relationship between emotional intelligence and academic achievement among higher secondary school students of Anand district.
- H<sub>2</sub>:** Female students will have higher emotional intelligence scores than male students, presenting through emotional intelligence.

## 3. Methodology

### 3.1 Sample

A descriptive research and correlation survey research design was adopted in this study. The statistical population of this study includes all of the higher secondary students at Anand district. A sample of 250 students has been selected through random sampling.

### 3.2 Instrument

#### 3.2.1 Emotional Intelligence scale

Emotional intelligence scale developed by Prof. P. P. Patel was used. This scale was standardized on the students of 11th and 12th of Gujarat state. The reliability of the scale by test-retest method is 0.89 and by split half method is 0.85. The validity of this scale is calculated by Item Index Validity method.

**Reliability:** The reliability of the emotional intelligence scale was found by test-retest method, Reliability coefficient 0.89 and by split-half method coefficient 0.85.

**Validity:** The item and the test as a whole appear to be plausible and relevant to the student's life situation. Furthermore, the items in the scale have hundred percent against educational and psychological express regarding their suitability to measure students emotional intelligence. Therefore test possess high face validity. In additional to this attempts have also been made to establish construct validity. No. of items: This scale consists of 77 true false type items.

Prescription of this scale (a) Self awareness (b) Self management (c) Social consciousness (d) Social skill

## 4. Data analysis

Data were analyzed by the, SPSS 15 software. The Pearson correlation test was applied to measure correlation between academic achievement and emotional intelligence. Parametric t-test test was applied for emotional intelligence and gender differences.

## 5. Result

The study sample was composed of 50 % (100) boys and 50 % (100) girls. Of the sample, 33% (66) of the students were from the commerce stream, 30% (60) of the students were from the science stream, and 37% (74) of the students were from the art stream. The academic achievement scores were 12 to 49. The age of all participants was between 16 and 18 years old. In this study, the females' overall emotional intelligence score was slightly higher than that of males.

To test the first hypothesis, the Pearson correlation test was used. As shown in Table 1, the P value for emotional intelligence was below the statistical significance set for the purpose of the current study. Therefore, the first study hypothesis was supported.

To test the second study hypothesis, the t- test was applied. As shown in Table 2, the P value was above the statistical significance set for the purpose of the current study. Hence, the second study hypothesis was not supported.

**Table 1: Results of Correlation Analysis among variables of interest**

Variables	N	Pearson r	Sig. of P
Achievement scores	200	0.69	0.000
Emotional Intelligence	200		

The result in table 1 revealed a significant outcome. The result showed that the relationship between the students' achievement and emotional intelligence scores ( $r=0.69$ ) is very high, positive and significant.

**Table 2: Distribution of sample according to Gender and Emotional Intelligence Score among higher secondary school students**

Gender	N	mean	SD	p-value
Boys	100	48.89	5.07	P<0.001
Girls	100	52.78	7.16	

## 6. Discussion

Results of the present study revealed that emotional intelligence had a significant correlation with academic achievement. This finding is consistent with the earlier research findings of Schuttle et al. (1998) and Tapia (1998) who found a significant relationship between emotional intelligence and the Scholastic Aptitude Test. The effect of emotional intelligence on academic success is well documented in the literature (Bar-On, 2003; Farook, 2003; Marquez et al. 2006; Adeyemo, 2007).

Also present study is consistent with researches by Rajimzadeh (2001), Samari and Tahmasbi (2007), Rahnama and Abdolmaleki (2009), Chan (2005) and Mimroot (2011). But the results are not in line with studies by Mansour (2001), Khalil Azar (2007), Hanifi and Jouybari (2008), and HasanZadeh and SadatiKiadehi (2009). Based on the consistency of the obtained results with most of the other researches the discrepancies with other studies can be related with personal differences and educational factors. Many researchers believe that individual and educational factors and cognitive and social nature have the highest impact in this regard. On the other hand, the educational facilities available to students and parents' educational level are important in the development of emotional intelligence.

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