

EMOTIONAL INTELLIGENCE AND ACADEMIC ACHIEVEMENT: A STUDY ON SECONDARY SCHOOL STUDENTS

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ABSTRACT: *The present paper is an attempt to examine relationship between emotional intelligence and academic achievement among secondary school students in selected government schools of Amritsar (Punjab). Sample for the study includes 200 students (100 boys and 100 girls) of class IX. Emotional intelligence was assessed by using standardised emotional intelligence scale (EIS) by Schutte et al (1998). Academic achievement was assessed by grades obtained by the students in their eighth grade. The data was analysed with the help of coefficients of correlation. The findings of the study revealed positive relationship between emotional intelligence and academic achievement of students ($r = 0.217, p < 0.01$).*

Keywords: Emotional intelligence, Academic achievement, secondary school students.

About Author



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INTRODUCTION

For many years educators, professionals and the public alike have been focusing on the intellectual achievement of individuals. In the past, perceived cognitive potential, more than any other factor, has been seen as a predictor of academic achievement. It has, however, been established that despite an individual having the intellectual potential to succeed at institutions of higher education, he/ she may experience difficulty dealing with emotional issues, have poor relationships, and be ineffective in his/ her decision making (**Goleman,1995**).

All students experience frustration and failure to achieve their goals. They depend on their strength of fortitude to control their negative thoughts and feelings. If they are able to control emotions, they will achieve the academic goals as well. The rapid developments of the era are challenging the adolescents to face the wave of globalisation. Thus, the ability to control the emotions has become important for not being carried away by the flow of negative and evil elements. A high emotional intelligence helps to maintain a state of harmony in oneself and finally be more self confident in dealing with the challenges of living and learning in educational institutions. It enables pupils to deal in difficult situations by taking critical decisions that will be advantageous to all of them (**Dweck, 1996**).

Emotional Intelligence is an ability, capacity or skill to perceive, access and manage the emotions of one's self, of others and of groups. It is an array of non-cognitive capabilities, competencies and skills that influences one's ability to succeed in coping with environmental demands and pressures. It is being able to monitor one's own and others' feelings and emotions, to discriminate among them, and to use this to guide one's thinking and actions (**Salovey and Mayer, 1990**).

Emotional competencies as suggested by **Daniel Goleman** are: **Self-awareness** - The ability to identify and name one's emotional states and to understand the link between emotions, thought and action. **Self-Regulation** - The capacity to manage one's emotional states or to shift undesirable emotional states to more adequate ones. **Motivation** - The ability to enter into emotional states (at will) associated with a drive to achieve and be successful. **Empathy** - The capacity to read, be sensitive and influence other people's emotions. **Social Skills** - The ability to enter and sustain satisfactory interpersonal relationship.

If proper efforts are made for training the emotions and developing proper emotional intelligence potential among the people, right from their childhood, then it will surely help in bringing mutual emotional understanding, empathy accompanied with right actions and behaviour on the part of the individuals and groups, to lead a better life.

Academic achievement is the maximum performance in all activities at school after a period of training. **Steinberg and Merriam (2010)** define achievement as something that is accomplished, particularly by effort, courage or special skills. It is also defined as an award for completing a particular task or meeting an objective. Achievement encompasses student ability and performance; it is multidimensional; it is intricately related to human growth and is 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. **Sattler (2001)** stated that several methods are used to measure a child's academic performance, including standardised achievement test scores, teacher ratings of academic performance, and report card grades.

Various Studies have shown the relationship of emotional intelligence and academic achievement. A study conducted by **Hassan et al (2009)** on underlying emotional intelligence in relation to level of curiosity and academic achievement of rural students in Malaysia, concluded that there was significantly positive correlation between emotional intelligence and academic achievement among the groups of 13 years ($r=0.85$, $p<0.01$) and of 16 years old students ($r= .85$, $p<.01$). Whereas, a negative correlation ($r= -0.70$, $p<0.01$) was found among levels of anxiety and the students' academic achievement. Pearson correlation analysis showed that emotional intelligence levels of all the students were significantly negative in relation to their anxiety levels. Emotional intelligence was also significantly positive in correlation with academic achievement of all variables including students' age and gender. Mean score of emotional intelligence within female students appeared to be higher than that in male students.

Another study by **Marquez et al (2006)** on relating emotional intelligence to social competence and academic achievement in high school students in Spain ($N=77$), showed positive and significant correlation between emotional intelligence and Pro-social behaviour ($r=0.41$, $p< .001$) and negative significant correlation between emotional intelligence and maladaptive behaviour ($r= -0.19$, $p<0.05$). The results supported incremental validity of emotional

intelligence and found positive indications of the importance of emotional intelligence in adolescents and social development.

Yet another study was conducted by **Aremu et al (2006)** to investigate the relationship among emotional intelligence, parental involvement and academic achievement of 500 senior secondary school students in Ibadan, Nigeria. The academic participants ranged in age between 14 and 18 years ($M=16.5$, $SD=1.7$). Results showed that both emotional intelligence and parental involvement could predict academic achievement. Similarly, there was significant positive relationship between emotional intelligence and academic achievement and between parental involvement and academic achievement ($p<0.001$). Results also revealed that both emotional intelligence and parental involvement had significant effect on academic achievement.

Parker DA et al (2005) conducted a study on relationship between emotional intelligence and academic achievement in high school ($N=667$) in Huntsville, Alabama and concluded that academically successful students had significantly higher levels of several different emotional and social competencies. These findings suggest that emotional intelligence plays an important role in the successful transition from higher school to university.

These observations, among others, have led to the realisation that individuals from changing populations may require more than intellectual abilities to exist and thrive academically. Now a days, Achievement and evaluations are interpreted in terms of not only IQ but of other factors also like social intelligence, emotional intelligence, spiritual and creativity and in terms of so many aspects. Children's performances and abilities are judged through covering various traits of personality. Still in India we are limited to subject achievement scores except in a small percentage of the population. There is no provision in our education system to provide education which could meet all types of needs of our children. The most neglected areas are social development, emotional and spiritual values, creativity etc. There is a need to relate and study various factors by combining them with academic achievement. Therefore it was thought logical to conduct a study to assess the effect of emotional Intelligence on academic achievement.

Methodology

Settings: The present study was conducted in selected government schools of Amritsar. Population for the present study was students studying in 9th standard.

Sample size: A sample of 200 students (100 boys and 100 girls) was randomly selected.

Tools:

- 1) The Emotional Intelligence Scale (EIS) of Schutte et al.(1998) was used in the present study This scale consists of four sub-scales. The four factors are described as follows: perception of emotions (10 items), managing emotions in the self (9 items), social skills or managing others' emotions (8 items), and utilising emotions (6 items). So, the total number of items for EIS was 33. Each item in the scale was rated on a five-point Likert scale from 1 = strongly disagree, 2 = somewhat disagree, 3 = neither agree nor disagree, 4 = somewhat agree and 5 = strongly agree. The score for emotional intelligence was calculated by summing the scores for the 33 items after reversing the scores for 3 items (items 5, 28, and 33). The total scale score ranged from 33 to 165, with high score indicating high emotional intelligence in respondents.
- 2) Academic achievement was assessed by grades obtained by the students in their eighth standard. Grading system used by government schools according to percentage scored is as follows: 80% - 90% - A, 65% - 79% - B, 50% - 64% - C, 35% - 49% - D and 00% - 34% - E.

Ethical considerations: A formal permission was obtained from District Education Officer (SS) of Amritsar district of Punjab, and then formal permission was obtained from the respective Principals of the selected government schools before approaching the students. Written consent from the parents and verbal assent from the students were also obtained.

RESULTS

Table 1: Frequency and percentage distribution of students according to level of Emotional Intelligence

N=200

| Level of Emotional Intelligence | N | % | Mean \pm SD |
|---------------------------------|----|----|-------------------|
| Very Good | 76 | 38 | |
| Good | 98 | 49 | 74.86 \pm 12.23 |
| Average | 24 | 12 | |
| Below average | 02 | 01 | |
| Poor | - | - | |

Maximum score=165

Minimum score=33

Table 1 depicts Frequency and percentage distribution of students according to level of Emotional Intelligence. It shows that nearly half (49%) of students had good level of emotional intelligence followed by 38% with very good level, 12% with average and remaining 1% with below average level of emotional intelligence.

Table 2: Frequency and percentage distribution of students according to level of Academic Achievement

N=200

| Level of Academic Achievement (Grade obtained) | N | % | Mean \pm SD |
|---|----|----|-------------------|
| A (80% - 90%) | 14 | 07 | |
| B (65% - 79%) | 64 | 32 | 61.88 \pm 11.98 |
| C (50% - 64%) | 96 | 48 | |
| D (35% - 49%) | 26 | 13 | |
| E (00% - 34%) | - | - | |

Table 2 depicts frequency and percentage distribution of students according to levels of Academic Achievement. It shows that nearly half of the students (48%) obtained 'C' grade, followed by 32% in 'B' grade, 13% in 'D' grade and remaining 7% in 'A' grade.

Table 3: Impact of Emotional Intelligence on Academic Achievement of students

N=200

| Level of Emotional Intelligence | Academic Achievement (Grade obtained) | | | | | Total | Mean±SD | Findings |
|---------------------------------|---------------------------------------|----------|----------|----------|--------|-------|---|----------|
| | A n(%) | B n(%) | C n(%) | D n(%) | E n(%) | | | |
| Very good | 10(13.2) | 27(35.5) | 28(36.8) | 11(14.5) | 0(0) | 76 | EI=74.86±12.23 AA=61.88±11.98 F=3.37** df _{BG} =3 Df _{WG} =196 | |
| Good | 4(4.1) | 34(34.7) | 49(50) | 40(15.4) | 2(0.8) | 98 | | |
| Average | 0(0) | 3(12.5) | 18(75) | 10(17.5) | 0(0) | 24 | | |
| Below average | 0(0) | 0(0) | 1(50) | 1(50) | 2(01) | 2 | | |
| Poor | - | - | - | - | - | - | | |

El= Emotional Intelligence

** - Significant at p<0.01

AA= Academic Achievement

BG= Between Groups

WG= Within

Groups

Table 3 depicts the impact of Emotional Intelligence on the Academic Achievement of students. It shows that very few (13.2% & 4%) with very good and good level of emotional intelligence scored 'A' grade whereas maximum of students (75%) who were having average level of emotional intelligence scored 'C' grade in their academics. In order to test it statistically, ANOVA was computed and F value (3.37) was found to be highly significant at p<0.01 level. Hence it can be concluded that there is high significant impact of Emotional Intelligence on the Academic Achievement of students.

Table 4: Gender wise frequency and percentage distribution of students according to Emotional Intelligence

N=200

| Gender | N | % | El score Mean ± SD |
|--------|-----|----|--------------------|
| Boys | 100 | 50 | 73.72 ± 12.22 |
| Girls | 100 | 50 | 76 ± 12.20 |

Maximum score=165

Minimum score=33

Table 4 depicts gender wise frequency and percentage distribution of students according to Emotional Intelligence. It shows that mean score of emotional intelligence was 73.72 ± 12.22 for boys and 76 ± 12.20 for girls. It is slightly higher in girls than in the boys.

Table 5: Value of coefficient of correlation between Emotional Intelligence and academic achievement
N=200

| Group | n | % | r |
|-------|-----|-----|---------|
| Total | 200 | 100 | 0.217** |
| Boys | 100 | 50 | 0.120* |
| Girls | 100 | 50 | 0.286** |

Table 5 depicts Value of coefficient of correlation between Emotional Intelligence and academic achievement. It shows that the values of coefficient of correlation between emotional intelligence and academic achievement for total sample, boys and girls are 0.217, 0.120 and 0.286 respectively. It means that there is high positive correlation between emotional intelligence and academic achievement across the total sample, boys and girls.

DISCUSSION

The analysis of data regarding impact of emotional intelligence on academic achievement revealed that there is high significant impact of Emotional Intelligence on the Academic Achievement of students as computed by analysis of variance (**F=3.37, p<0.01**), and also by computing coefficient of correlation which showed high positive correlation (**r=0.217, p<0.01**). These findings are supported by the results of a study conducted by **Dr. S. Chamundeshwari (2013)** among 321 students at higher secondary level from Chennai and found that there was high positive correlation between emotional intelligence and academic achievement ($r=0.25, p<0.001$). Another study that supports the findings of the present study was conducted by **Farah Malik & Sultan Shujja (2013)** on 204 eighth grade students from Pakistan and found positive correlation between the two constructs ($r=0.18, p<0.01$). These findings again matched with the results by **Dr. Nasreen Qusar (2013)** who conducted a study on relationship between emotional intelligence and academic achievement of 250 high school students in Udhampur district of Jammu, and found that there was a positive and significant relationship between the two ($F=7.40, p<0.01$). Findings of the present study were also congruent with a study conducted by **Arockia Maraichelvi & Sangeetha Rajan (2013)** on relationship between emotional intelligence and academic achievement among 300 undergraduate students in Coimbatore and found positive and significant relationship between both the constructs ($F=11.23, p<0.01$). Another study findings that were congruent with the present study was conducted by **Amanda C. Santiago (2010)** who studied the relationship of emotional intelligence of 100 intermediate students with their academic achievement and found a positive and significant relationship of the two ($r=0.44, p<0.01$). The findings are also consistent with the findings of study by **Ana Babik Cikes & Vesna Busko (2012)** on the impact of emotional intelligence on the academic achievement of 133 students aged between 10-15 years and findings revealed positive and significant correlation ($r=0.37, p<0.001$).

Educational Implications

- The key to obtain success of learning is to give full attention and concentration during the process of teaching and learning. High level of emotional intelligence can help calm the mind and thus increase the absorption of information received. As a result it will contribute to their academic achievement. It is recommended that students' academic achievement should be enhanced with the use of emotional intelligence training.
- The inclusion of emotional intelligence as part of the curriculum could lead to a variety of positive personal, social and societal outcomes. Increasing emotional intelligence may not only facilitate the learning process and improve career choices and likelihood of success, but could also enhance the probability of better personal and social adaptation in general. The educational experience would be more balanced or holistic as it would focus on educating the whole person. There could also be beneficial effects for the institutions, improving the environment in which the educational experience occurs.

CONCLUSION

Today's students are going to be tomorrow's political and business leaders, medical specialists, teachers, scientists, entrepreneurs, artists, and parents. The urgent need for them is to be academically prepared to compete and thrive in tomorrow's world. The more we understand about non-academic aspects, such as emotional intelligence and its contribution to overall success, the better we may be able to address the social, economic, and political challenges that face all citizens. Excellent performance in academics is the key target and goal for each student regardless of the ethnic group he/ she belongs to. In order to obtain good results, apart from effective learning techniques, students should be able to recognise themselves in particular of self emotions, so that it does not become a stumbling block to success. Hence the need to identify oneself, emotional intelligence should be noted not only for academic interest but also for success in life.

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