Research Article

The relationship between emotional intelligence and academic achievement in medical undergraduate

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ABSTRACT

Background: In today’s era of technology, intelligence and success are not viewed the same way they were before. New theories of intelligence have been introduced and are gradually replacing the traditional theory. Academic achievement is based on creativity, emotions, and interpersonal skills.

Methods: The aim of this study was to see whether there is a relationship between emotional intelligence and academic success. Study was done on 1st MBBS students of Govt. Medical College, Bhavnagar. The sample size was 75 students (boys and girls). The emotional intelligence questionnaire from Institute for Health and Human Potential was given to the students. Depending on the EQ score we divided the students into five groups and compared with their academic performance.

Results: Study showed inverse relationship between emotional intelligence and academic achievement.

Conclusion: There is a negative relation among emotional intelligence and academic achievement of the participants.

Keywords: Emotional intelligence, Academic achievement, Medical student, Fresher

INTRODUCTION

According to Salovey and Mayer\textsuperscript{1} Emotional Intelligence is being able to monitor one’s own and other’s feelings and emotions, to discriminate among them, and to use this to guide one’s thinking and actions. Again, Salovey and Mayer\textsuperscript{1} wrote that an emotionally intelligent person is skilled in four areas: identifying, using, understanding, and regulating emotions.

Goleman\textsuperscript{2,3} also stressed that emotional intelligence consists of five components: Knowing one’s emotions (self-awareness), managing them, motivating self, recognising emotions in others (empathy), and handling relationships.

Emotional intelligence (EI) can be summarized as the ability to understand and recognize emotional states and to use that understanding to manage one’s self and other individuals or teams.\textsuperscript{1,2} Emotional Intelligence theory by Mayer & Salovey\textsuperscript{1} then Goleman\textsuperscript{2,3} has introduced theory of multiple intelligence.

In a studies conducted by Parker, Summerfeldt, Hogan and Majeski\textsuperscript{4,5} they discovered that various emotional and social competencies were strong predictors of academic success. Similarly, Parker et al.\textsuperscript{6} found emotional intelligence to be significant predictors of academic success. In the same vein, Low and Nelson\textsuperscript{7} reported that emotional intelligence skills are key factors in the academic achievement and test performance of high school and college students respectively. Likewise, Abisamra\textsuperscript{8} reported that there is a positive relationship between emotional intelligence and academic achievement.
As such, EI has the potential to influence two important competencies in the practice of medicine, i.e., interpersonal communication and team-leadership skills, both of which are essential to systems-based practice. The purpose of this study was to see whether there is a relationship between emotional intelligence and academic success.

METHODS

Study was conducted in Government Medical College, Bhavnagar located at the state of Gujarat in India. The population of this study was 1st MBBS students, who take admission to medical graduate course after 10+2 exit exam. 75 undergraduate medical students were enrolled in the study after taking Involved consent from the students after six month of their admission in medicine. Validated EQ questionnaire prepared by The Institute for Health and Human Potential was used as instrument to know the EQ level of the student. Depending on the EQ score we have divided the students in to five groups and compared with their academic performance. Academic performance was calculated by mean of all first semester grades and 12th (10+2) standards results. Pearson correlation was applied to see the correlation between two variables.

RESULTS

Group according to EQ score with their academic percentage of 75 first year medical graduate are shown in table 1 below:

Table 1: EQ wise distribution of academic performance.

<table>
<thead>
<tr>
<th>N = 73*</th>
<th>Eq</th>
<th>Academic %</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>25-30</td>
<td>73.91</td>
</tr>
<tr>
<td>7</td>
<td>31-35</td>
<td>66.33</td>
</tr>
<tr>
<td>18</td>
<td>36-40</td>
<td>65.78</td>
</tr>
<tr>
<td>25</td>
<td>41-45</td>
<td>63.78</td>
</tr>
<tr>
<td>19</td>
<td>46-50</td>
<td>57.78</td>
</tr>
</tbody>
</table>

*Two student did not answered

In table 1 we can see that there is large difference in EQ of first year medical student’s ranging from 25 to 50. Interpretation of EQ score can be explained (Based on standardise score prepared by The Institute for Health and Human Potential) as follow:

14.67% study population had low EQ (25 – 35), 57.33% study population had slightly above average EQ (36 – 45)- with room to grow, 25.33% study population had very high emotional intelligence (46 – 50), Exceptional EQ (55 – 60). There was no one with exceptional EQ.

Correlation coefficient of different score was 0.017, Pearson correlation coefficient is -0.951 with p <0.05 suggesting inverse correlation between both variable. Correlation of EQ with the performance is graphically displayed in Figure 1 below:

Figure 1: EQ wise distribution of academic performance.

Table and figure both shows that there is clear-cut inverse relationship with the EQ and student performance.

DISCUSSION

EI is a tool that can be used for team leadership as well as communication training and has gained recent interest in the medical literature. Although there is no uniformly accepted model of EI, three major models have most commonly been referred to: Mayer and Salovey, Goleman, and the Bar On model of Emotional-Social Intelligence. All of these models highlight the importance of emotional awareness and its impact on relationships with other individuals.

During the past decade, the use of EI has gained momentum, spurred on by a 1998 article by Goleman in the Harvard Business review that detailed how EI, compared with the traditional intelligence quotient and technical skills, distinguishes effective leadership among executives.

Enthusiasm for implementing EI based leadership training has carried over into health care management and, subsequently, health care professionalism. The importance of EI for nursing training as well as nurse retention has been described. EI has also been measured and correlated with healthy conflict-management strategies in nursing students. EI has been measured and used with medical students for the purpose of communication training and has been shown to correlate with Objective Structured Clinical Examination scores.

In contrast, in our study represent stunting of growth in EI, perhaps caused by the stresses or curriculum of medical education. Long hours and financial difficulties may lower scores on the overall Happiness or Social Responsibility scales.
IQ and EQ are complementary skills, and the first step is to become aware of the importance of this skill, so that you can concentrate on using your high IQ to improve your EQ. Growing emotionally is a lifelong process. No matter how old you are, you can always learn to become aware of your feelings, to accept them, and to use the information they offer to your patients’ advantage and your own. Some doctors develop these skills intuitively, while others need to learn them.

Therefore, we are neither recommending the use of this test for screening, nor recommending it as a method of evaluation of students during a training program. It is currently in early research stages and as such should be only used for organizational development and making student aware of self.

**CONCLUSION**

Analyses of relationship among emotional intelligence and academic achievement in this study indicated that there is a Negative relation among emotional intelligence and academic achievement of the participants.

**Abbreviations**

IQ = intelligence quotient  
EQ= emotional quotient

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**Conflict of interest: None declared**

**Ethical approval: Not required**

**REFERENCES**


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