ABSTRACT

As humans we need to handle frustration, manage stress, resolve conflicts and take decisions in our personal as well as professional lives on day to day basis. In teaching and learning process also emotions play significant role because it involves struggle, frustration, anxiety, thrill and excitement (Claxton, 1999). Conventionally it is believed that an intelligent person is professionally more efficient and successful, but in the past two decades studies undertaken by many researchers have shown that the Emotional Intelligence (EI) of a person is equally important in predicting future success as it plays more role than rational intelligence in handling such situations (Goalman, 1995; Lam & Kirby, 2002; Singh, 2006). But the scope of the earlier studies was mostly limited to corporate sector and in the field of education it was limited to school level.

Studies have found that prevalence of stress, anxiety and depression among medical and engineering students is quite high and especially among medical students it is very high (Kumar, Jain & Hegde (2012); Collins (2010); Schneider, 2007; Vaidya & Mulgaonkar, 2007). In the past few years, suicide and depression cases have increased considerably in both government and private medical and engineering colleges of India (Krishnaswamy, 2011; Alvi, 2012). Depression is becoming highly common and according to WHO, by 2020, it would be the second-most prevalent condition worldwide (Singh, Lal & Shekhar, 2010). The findings call for increasing concern about the psychological wellbeing of the students as anxiety and depression among these students interfere with their psychological, social, and academic functioning, placing them at greater risk for problems such as substance abuse and suicidal behaviour.

Despite the fact that medical and engineering courses are quite extensive and demanding which quite often leads to stress and anxiety among these students, not much literature could be found on the role of EI competencies in dealing with anxiety and academic achievement among these students. Research literature on the role of EI and its relationship with the occupational stress and teacher effectiveness among the faculty members of medical and engineering colleges was limited and especially in Indian context there was none. Giving due importance to cognitive intelligence, this research is an attempt to explore the significance of EI in teaching-learning environment for the two most important fields of professional education i.e. medical and engineering.
As teaching and learning are integrated process, studying students and teacher variables together gives a better understanding of teaching outcomes. Therefore, the problem definition for this research work is to measure certain competencies of emotional intelligence and examine their relationship with anxiety among students and occupational stress and teacher effectiveness among faculty members of private medical and engineering colleges in Uttar Pradesh, India, so as to assess the need of an EI Training Programme for the students and faculty members.

The sample was restricted to private medical and engineering colleges because the selection process of the students and faculty members in private colleges is different from those of government colleges. There is also a difference in the functioning of government and private colleges. Since there was a requirement of students’ rating for teacher effectiveness, which is a sensitive issue, the criteria and rating method had to be properly explained to the students in addition to any queries, therefore the presence of the researcher during data collection was necessary. Seeing this constraint of approachability the collection of data was restricted to the colleges in Uttar Pradesh only. Twelve colleges (6 each of medical and engineering) from Uttar Pradesh, India were shortlisted and contacted for seeking permission to conduct the study but only seven colleges (3 medical and 4 engineering) granted the permission. The final sample size consisted of 346 students from 2nd and 3rd year; and 310 faculty members from the various departments of respective medical and engineering colleges. Thus, the total participants were 656 (346 students +310 faculty members).

Emotional Intelligence Scale (EIS, 2007), Occupational Stress Index (OSI, 1984) Teacher Effectiveness Scale (TES, 2010) were used as faculty questionnaires, whereas, Teacher Rating Scale (TRS, 2003), Sinha’s Comprehensive Anxiety Test (SCAT, 2007), Learned Optimism Scale (LOS, 2000) and Deo-Mohan Achievement Motivation Scale (DMAMS, 2002) were administered as students questionnaires. Academic results of the students were considered as their academic achievement. All measures used in the study are constructed and standardized on Indian population and available at Psychological Corporation of India.

The main objectives of the research were: (1) Assessing anxiety among medical and engineering students (2) Evaluating the relationships between anxiety, optimism, achievement motivation and academic achievement among the students (3) Exploration of achievement motivation factors among these students (4) Exploration of occupational stressors among
faculty members (5) Determining the relationship between EI, Occupational Stress (OS) and teacher effectiveness (6) Proposing EI Training Programme for students and faculty members, based on the findings of this study.

The study also projected some secondary objectives: (1) To find if there was any difference between self-reported and students-rated Teacher Effectiveness (2) To observe if there was any difference in EI, OS and teacher effectiveness across gender and between medical and engineering faculty members (3) To observe if there was any difference in anxiety, optimism, achievement motivation and academic achievement across gender and between medical and engineering students. The hypotheses were formulated based on the above mentioned objectives. The findings of this research have led to the following conclusions:

1. Anxiety among students was considerably high with medical students reporting even more and it revealed significant negative relationships with students’ academic achievement. Optimism and achievement motivation among students showed significant positive relationship with their academic achievements, whereas, with anxiety it was negative.

2. Out of nine factors of achievement motivation incorporated in the study, self determination showed the highest correlation with achievement motivation, whereas future goals and academic motivation emerged as the best predictor of academic achievement among medical and engineering students respectively.

3. 69% of the faculty members reported moderate level of occupational stress, whereas 16% reported high level. Among the twelve factors of occupational stress incorporated in the study, under participation, role conflict, intrinsic impoverishment, group pressure, strenuous working conditions and role overload were the most influential factors of stress.

4. Occupational stress among the faculty members revealed a significant negative correlation with teacher effectiveness and EI, whereas, a significant positive relationship was found between EI and teacher effectiveness (both self reported and students rated).

5. Out of ten EI competencies considered in the study; emotional stability, self motivation, managing relations and self awareness were found to be most significant predictors for both teacher effectiveness and occupational stress.

6. Although a moderate correlation existed between self-reported and students-rated teacher effectiveness, but a large difference between the two scores, which shows the tendency of faculty members either over-reporting their teaching effectiveness or overlooking their flaws.
7. Self reported teacher effectiveness and EI among engineering faculty members was relatively higher than those of medical faculty. However, no significant difference was found in students-rated teacher effectiveness and OS between the two groups.

8. Anxiety among medical students was found to be higher than those of engineering students and their optimism and academic achievement was relatively lower, whereas, there was no significant difference in achievement motivation among the two groups.

9. No significant gender differences were found in any of the variables among faculty members as well as among students except for achievement motivation where female students scored higher than the males.

The findings of study illustrate that an EI Training Program focussed on the emotional experiences of the students and faculty members is necessary as it would assist them in dealing with the emotional aspects of teaching and learning. Therefore, a customized EI training programme has also been proposed in this thesis as part of faculty and students EI development programme in medical and engineering colleges. This research also recommends an informal direct feedback by the faculty members from their students. This kind of feedback will be mutual, more genuine and free from the drawbacks of official feedbacks. Avoiding gender biases in staff appointments and allocating responsibilities is also recommended as contrary to gender stereotypes females were found equally competent in handling academic challenges.

**Key Words:** anxiety, optimism, achievement motivation, academic achievement, medical and engineering students, emotional intelligence, occupational stress, teacher effectiveness, gender difference, faculty members, private colleges