CHAPTER 4
EMOTIONAL INTELLIGENCE IN ACADEMIA:
LITERATURE SURVEY

This chapter presents the research literature reviewing the significance of EI in teaching-learning process. Student variables under review are anxiety and its relationship with optimism, achievement motivation and academic performance whereas faculty variables are EI, occupational stress and teacher effectiveness (both self-reported and students rated)

4.1 Role of EI in Teaching and Learning

Efficient teaching and good learning are the two most important factors for success in academia. Conventionally, in higher education a teacher brings two things to the classroom that are of value to the learners. One is expertise in the subject; the other is knowledge of teaching methods i.e. a teacher’s pedagogy. But EI is the unrecognized third component that a teacher has to offer to the learners (Mortiboys, 2005) because learning involves struggle, frustration, thrill or excitement (Claxton 1999). A teacher needs an understanding of individual and group motivation and behavior to create a learning environment that encourages positive social interaction, active engagement and motivation to learn.

According to neuroscience the neural connection between the thinking and emotional centers of the brain can either enhance or inhibit a person’s ability to learn (Davidson, 2000; Adolphs, 2003; Cacioppo & Berntson, 2009). Studies have also shown that emotions can activate and stimulate the brain for better recall (Cahill et al., 1994; Dalgleish, 2004) and are crucial to sensory development because they facilitate the storage and recall of information (Rosenfield, 1988). Stress and threat cause the brain to downshift; this reduces the opportunity for neuron growth and causes learning to be inhibited (Ornstein & Sobel, 1987). As a person’s stress increases, the body reacts by secreting more adrenaline and noradrenaline (stress hormones). Simultaneously, cortisol is secreted, which lasts even longer than adrenaline and in addition interferes with learning process (Goleman et al., 2002). Hence, as teachers we must try to understand the effect of stress not only on our own efficiency but also on students’ learning.
Emotional maladjustment could result in inattention and poor memorization resulting in poor learning. Anxious, unhappy and angry youngsters do not make ideal students and those who are caught in these states do not take information efficiently or deal with it well (Lewkowicz, 1999). Feelings play an integral role in performance. Therefore, only the subject knowledge of a teacher is not enough; one must create an environment which is inviting, safe and friendly because how a person learns is as important as what one learns. A caring and dedicated teacher gains his/her students’ trust and respect, both of which are important for learning to occur.

Researches in Social Neuroscience indicate that while two people interact, their emotional centres impact each other, for better or for worse (Cacioppo, Berntson & Decety, 2010). Thus the emotional tone of a classroom can be set to a large extent by the teacher. This means that teachers are able to help students get in better brain states for learning by acknowledging the learners’ expectations, hopes, worries and so on, which has a positive effect on how they feel (Mortiboys, 2005). Emotionally Intelligent teacher creates a positive learning environment which is respectful, supportive, empathetic, interesting/stimulating and safe i.e. free from threats, force, punishment, coercion, manipulation, pressure, stress, intimidation, humiliation, embarrassment and invalidation (Spergel, 2008).

In academia many research have been conducted to search for variables (personal, psychological and environmental) that could be manipulated in favour of academic gains. Some of the important personal and psychological variables that influence learning and academic achievement of the students are intelligence, cognitive styles, personality, self-concept, task orientation, skill acquisition, interest in the subject, self-confidence, anxiety, self-esteem, optimism, self control, self-expectations, ambitions, fear of failure, motivation and learning approaches (Atkinson, 1999; Eccles et al., 1998; Ning & Downing, 2010). The environmental variables could be opportunities, parents’ expectations and support, quality of infrastructure, instructional materials, teaching styles and teachers’ attributes etc. (Daniels, Kalkman & McCombs, 2001; Tella, 2007). The current research has focused on anxiety, optimism and achievement motivation as students’ psychological variables and teacher’s EI, occupational stress and teacher effectiveness as environmental variables. Therefore, the subsequent sections of this chapter will present the literature review on these variables relevant for students learning.
4.2 Anxiety among Medical and Engineering Students

Pursuing higher education is considered to be stressful. While widespread studies on which majors experience more anxiety and pose the highest risk of stimulating depressive symptoms have yet to materialize, there definitely exist researches indicating that medical and engineering students have higher risk of anxiety and depression. According to Collins (2010), a study of almost 1000 students from medicine, law, mechanical engineering and psychology at the University of Adelaide has found that the levels of distress among mechanical engineering and medical students were 52% and 44% respectively. Study conducted by Singh, Lal & Shekhar (2010) in a medical college of North India revealed that a total of 49.1% students reported depressive symptoms.

Kumar, Jain & Hegde (2012) in their study on students of a medical college in South India found the overall prevalence of depression to be 70%. Other studies on medical students have also revealed that their stress levels are genuinely high (Miller, 1994; Supe, 1998; Saipanish, 2003; Ray & Joseph, 2010) and as compared to other students, medical students have more distress, anxiety and depression (Lloyd & Gartrell, 1984). Although no definitive statistics on the prevalence of anxiety and depression amongst engineering students seems to exist, but some studies have shown that there is an excessive anxiety and stress among these students. Study conducted at Cornell’s College of Engineering revealed that 62% of Engineering students felt extremely anxious about their grades (Schneider, 2007).

4.2.1 Anxiety: Definition and Perspectives

Anxiety is one of the most widely experienced emotions of all and one of the most fundamental constructs of all human behavior. Anxiety is a psychological and physiological state characterized by somatic, emotional, cognitive and behavioural components (Ohman, 2000). It is also described as the mental state that results from a difficult challenge for which the subject has insufficient coping skills (Heide & Borkovec, 1983). It is considered to be a normal reaction to a stressor and it may help an individual to deal with a demanding situation by prompting him/her to cope with it but when anxiety becomes excessive, it can have a serious impact on daily life and interferes with the normal functioning of a person. Thus, anxiety has a wide range of perspectives as normal facilitating, motivation, personality trait or a negative emotional state or reaction which could also be debilitating (Cox & Norton, 2000).
4.2.2 Symptoms of Anxiety

Anxiety is accompanied by a variety of physical, emotional, cognitive and behavioural symptoms. Palpitations, sweating, trembling, shortness of breath, sense of choking, chest pain, headache, nausea, stomach upset, dizziness, numbness or tingling, chills or hot flashes, restlessness, fatigue, muscle tension and sleep problems are the physical symptoms (Bourne, 2005). The emotional effects of anxiety may include feelings of apprehension or dread, a general sense of depression, doom and gloom, anticipating the worst and having nightmares. The cognitive effect is being unable to think, difficulty in concentrating, irritability and watching for signs of danger. The behavioral effects of anxiety may include withdrawal from situations which provoke anxiety, nervous habits, and increased motor tension like foot tapping (Barker, 2003).

4.2.3 Causes of Anxiety among Medical and Engineering Students

Students are particularly susceptible to anxiety, as they have to face a number of emotional problems along with academic demands. Academic reasons like enormous syllabus, the difficulty of the curriculum, long studying hours, frequent examinations and emotional factors like problems with peers or faculty member, competitive environment, lack of recreational activities, staying away from home, financial problems, uncertain future, cultural and minority issues, mismatch between capability and expectation are some reasons of stress and anxiety among medical and engineering students (Foster & Spencer, 2003; Schneider, 2007). However, there can be other reasons for anxiety among the students like stress due to family problems, a natural disaster, victimization by crime, physical abuse, medical illness, intoxication etc. Students also suffer from choice anxiety. With so many options, students in the present era are faced with greater choice, more competition and less time to consider their options or seek out the right advice which many a time leads to anxiety (Downey, 2008).

4.3 Academic Achievement

Academic achievement can be defined as what a student does or achieve at school, college or university, in class, in a laboratory, library or project work. It is an ability to study and understand facts and being able to communicate the knowledge verbally. It also refers to how students deal with their studies and how they cope with or accomplish different tasks
assigned to them according to their curriculum. Academic achievement is commonly measured by examinations or continuous assessment but there is no general agreement on how it is best tested or which aspects are most important: procedural knowledge such as skills or declarative knowledge such as facts (Ward, Stoker & Murray, 1996). Individual differences in academic performance have been linked to differences in intelligence and personality. Apart from IQ, students who are higher in conscientiousness (component of emotional intelligence linked to effort and achievement motivation) and curiosity tend to achieve highly in academic settings (Sophie, Benedikt, & Tomas, 2011). EI competencies like self-awareness, self-control, optimism, achievement motivation, and communication skills help the students in better academic performance (Goleman, 1995).

4.4 Optimism: An Essential EI Competency for Students

Optimism is the tendency of an individual to believe in the best possible outcomes in the face of uncertainty (Peale, 1956). It is a strong expectation that despite the inevitable setbacks and frustrations, events and experiences will eventually turn out all right. It is also closely related to the concept of positive attitude and self-efficacy, a belief in how successful one can be in terms of task accomplishment (Gist & Mitchell, 1992). Optimism and Self-esteem are the key aptitudes in handling frustration and better performance (Scheier & Carver, 1993). Seligman (1995) reported that college students with optimistic explanatory styles outperform predictive measures such as SAT scores or high school grades whereas students with pessimistic scores underperform these tests.

Attributions affect optimism: Persons high on optimism attribute their failure to something they can change, not to some innate weakness that they are unable to overcome whereas pessimists interpret rejections as personal and give a signal to their minds to mean: “I am a failure” - which is bound to trigger apathy, defeatism, frustration and depression. Optimistic statements are usually based on logical and concrete facts and depend upon the explanatory styles or attributions of a person. Earlier studies have suggested that attributions to controllable and unstable factors (lack of time or lack of effort and preparation) may facilitate academic performance whereas attributions to permanent and uncontrollable factors like luck or inability may lead to lower academic performance (Noel, Forsyth & Kelley, 1987; Tracy, 1993; Alderman, 1999). As attributions influence individual’s reactions to their failures and successes, an attempt to reshape these attributions may help undo some
of the harmful motivational and emotional consequences of failures (Forsyth & Macmillan, 1991; Green et al., 2006).

4.4.1 Learned Optimism

Optimism can be temperamental i.e. some people by nature are more positive about life, but at the same time, it can also be learned and practiced with the right type of experiences (Seligman 1991). Seligman has presented “ABCDE” structure for explanatory styles that works on the same principles for individuals, children, and in the organizational context (A = Adverse event or situation; B = Beliefs about that event; C = Consequences of those beliefs; D = Disputation and Distraction; E = Energization). The trick is to learn to identify adverse situations or events that you routinely face. Learn to hear (and record) the beliefs about those events that come to your mind. Feel the consequences of those beliefs (and write them down), in terms of emotions, energy, will to act, etc. Once you have gotten familiar with these components, dispute those beliefs and distract yourself. Disputation can involve challenging the usefulness of the belief, generating alternative positive thoughts and interpretation.

Selecting achievable goals enhances optimism. It is a sense of enthusiasm, confidence and control, which develops, when one achieves small successes. It proves that one is capable of accomplishing what one sets out to do. If one sets unrealistic goals or a task is initiated haphazardly, the inevitable failures will lead one to abandon the task prematurely. Therefore, optimism needs to be realistic because being over-optimistic may hamper the performance as one may overlook the negative outcomes thus may not be well prepared for undesirable situations. In comparison with an over-optimistic approach, attention to negative possibilities enables an individual to prepare and find solutions for adverse circumstances (Isaacowitz & Seligman, 2001; Showers, 1992).

4.5 Achievement Motivation: Vital EI Competency for Students

Motivation is a complex area central both to the task of learning and to EI. Our emotions underlie our motivations. Emotions can be pleasant or unpleasant. We are motivated to avoid situations where we might experience unpleasant emotions such as anxiety or fear. Alternatively we are motivated towards feelings of success, achievement or happiness. Motivation holds the key to the understanding of human behaviour (Okoye, 1985). Of all
the personal and psychological variables that have attracted researchers in the area of educational achievement, motivation seems to be the most popular (Tella, 2003) because psychologists believe that motivation is the most significant factor for learning (Biehler & Snowman, 1986). In academia, motivation is referred to cognitive, emotional and behavioral indicators of students’ investment in and attachment to education (Tucker, et al. 2002). Achievement motivation could be seen as self determination and persistence to succeed in whatever activities one engages in, be it academic, professional or any other (Tella, 2007).

Motivation requires the ability to delay gratification which in turn requires self-control. This helps in resisting temptations and developing self-discipline. Study by Shoda, Mischel and Peake (1990) revealed that students who were able to delay gratification were more popular, earned better grades, and had an average of 210 more points on their SAT tests. The findings of the classic Marshmallow Experiment conducted at Stanford University in the US in the 1960s suggest that children displaying a greater capacity to delay gratification at a young age were, in their teens, more socially competent, confident and had higher self-esteem than those who were less able to delay gratification. In academic settings students' motivation could be more malleable than their cognitive ability and as such could prove to be a potential lead for the educational system for improving learning and achievement processes in students (Spinath et al., 2006).

4.5.1 Types of Motivation

Individuals satisfy their needs through different means, and are driven to succeed for varying reasons both internal and external. Based on these two major goals (implicit and explicit), psychologists have established two major concepts in regards to motivation: 1) Intrinsic Motivation is seen as internal reward and has the ability to foster lifelong learning skills (Mesali, 2010). Intrinsically motivated students strive to achieve their goals for personal satisfaction and self-improvement. 2) Extrinsic Motivation is influenced by some outside force or variable like getting rewarded or praised or some gain. Extrinsically motivated people compete with their surroundings to simply be classified as the best.

4.5.2 Factors of Achievement Motivation

During the past half century, a variety of crucial motivational beliefs, values, and goals have been identified and examined (Wigfield & Eccles, 2002). Some important variables that influence achievement motivation are discussed below.
i. **Self Determination:** It is a form of intrinsic motivation. Self-determination is not just having the knowledge to complete various tasks, but also believing that one can do so. It also includes initiating and regulating one’s tasks (Deci & Flaste, 1995).

ii. **Need to Achieve:** All students are influenced by a need to achieve, but with different degrees depending upon his/her attitude toward success. For some students, the desire to achieve is so strong that they work hard to overcome the factors that could affect their achievements, such as lack of skills, lack of experience, lack of ability, or lack of time. Some students work hard to achieve a task they do not enjoy, solely to maintain their high grade point average or high class rank (Atkinson, 1999).

iii. **Performance Goals:** This is extrinsic motivation. Students with performance goal orientation are concerned and focused on attaining competence relative to others, maintaining self-worth and avoiding failure (Anderman & Midgley, 1997).

iv. **Task Goal Orientation:** It is a type of intrinsic motivation. Students with a task goal orientation are motivated by a desire to increase their knowledge on a subject or by enjoyment from learning the material. They are more likely to engage in challenging tasks, seek help as needed, and adopt useful cognitive strategies, and most importantly, tend to be happier with themselves as learners (Anderman & Midgley, 1997).

v. **Fear of Failure:** Students often believe that the ability to learn is fixed at birth and any effort put forth to learn more will be wasted. Therefore, challenging such negative attributions would have a strong positive effect on motivation (Alderman, 1999). According to Tracy (1993), fear of failure is what keeps most people from succeeding, but with the correct attitude, one can make deliberate, conscience efforts to make improvements.

vi. **Competency Beliefs:** The perception one has of one’s perceived abilities or competencies have an effect on task motivation. Personal experience is one of the most influential sources of efficacy information. Successes tend to raise competency beliefs whereas, failures tend to lower them. If a person fails at a task, expectations for future success differ depending on whether he/she attributes the failure to lack of effort or to not having the ability to succeed on the task (Alderman, 1999).

vii. **Probability of Success:** The strength of the motivation to act depends on the perceived achievability of the task. Students with high expectation for success on a task usually persist at it longer and perform better than students with low expectations (Eccles et. al.1998).
Researchers like (Carr et. al. 1991) have found that students with high IQs and high expectations of success get the highest grades. Students with high IQs and low expectations receive lower grades than students with low IQs and high expectations.

viii. Perceived Value of the Task: Authentic human achievement is concerned with what is significant, worthwhile and meaningful (Keefe & Jenkins, 1993). If students feel the task has no value, they choose not to do the task, even though they are perfectly capable of accomplishing the task. For example, a student may be highly motivated to achieve in co-curricular activities but not in academics. Thus, different situations have different achievement attaining values for students (Eccles, et. al. 1998).

ix. Social Goals: Dowson and McInerney (2001) posit that students have social goals also that influence their motivation. These are: 1) Social Affiliation - working with their peers engenders a sense of belonging, help them work more effectively and promote positive feelings toward learning. 2) Social Responsibility- students get motivated by a desire to fulfill their role expectations from parents, teachers and peer. They feel proud, excited, and satisfied when they met these expectations. 3) Social Concern – motivation to help others and ownership of ideas and projects develops a sense of responsibility, pride and the motivation to succeed.

x. Integrated Motives or Multiple Factors: Seldom is a person driven by a solitary, isolated motive. According to Dowson and McInerney (2001) there can be a variety of motives that are possible for predicting behavior or understanding motivation. Study by Hwang, Echols, and Vrongistinos (2002), found that the students integrated a combination of intrinsic, extrinsic, future, and social goals. Research has also suggested that task and performance goals are not mutually exclusive (Kaplan & Maehr, 2002).

4.6 Relationship between Anxiety, Optimism, Achievement Motivation and Academic Achievement

4.6.1 Relationship between Anxiety and Academic Achievement

Anxiety adversely affects learning and study skills as it disrupts the encoding of material and interferes with cognitive activity such as memory recall and concentration. Researchers have established that people with high levels of anxiety are associated with low academic achievement (Williams, 1996; Zeidner & Safir, 2001). Rana and Mahmood (2010) found
that trainee-teachers’ test anxiety was negatively correlated with their achievement in educational test and measurement. Similar findings among students at the post graduate level were reported by Idaka et al. (2011) and among Iranian high school students by Talib et al. (2010). Mwamwenda (1994) in his study on university students found that highly test-anxious students performed poorly regardless of the amount of exam preparation and regardless of gender.

4.6.2 Relationship between Optimism and Anxiety

In a study conducted by Buchanan and Seligman (1995) learned optimism techniques were found to significantly reduce depression in a class of college freshmen. Study by Darvil and Johnson (1991) on college students revealed that subjects who believed that positive events were more likely to occur and negative events were less likely to occur felt that they were in moderate to strong control over event occurrence. Siddique et al. (2006) in their study on first year Law students found that optimism was inversely related to both dispositional and state anxiety, although it was not related to performance. Huan et al. (2006) found a significant negative relationship between optimism and academic stress among secondary school students in Singapore. Brissette, Schrier and Carver (2002) in their study on college students of both genders found optimism was prospectively associated with less stress and less depression, and greater increase in perceived social support. Optimists may have more social support to accomplish their tasks (Davis, et al. 1992) and are more likely than pessimists to engage in positive health habits, psychological well-being and cope more adaptively with stress (Cassidy, 2000; Bar-On, 2005; Pereira, 2008; Segerstrom, 2007).

4.6.3 Relationship between Optimism and Academic Achievement

Studies have shown a positive relationship between optimism and performance in work place (Dixon & Schertzer, 2005; Yousef & Luthans, 2007; Jensen et al., 2007; Medlin & Green, 2009; Kluemper, Little & DeGroot, 2009). However, there are mixed findings of studies on optimism and its relationship with academic achievement. Study by Owayed (2005) on students of Education College in Kuwait showed significant positive correlation between academic achievement and both optimism and self-esteem, whereas the correlations were negative between academic achievement and both anxiety and pessimism. Research findings of Crosno et al. (2009) reveal that optimists are able to anticipate and respond proactively to stressors, resulting in less burnout and higher levels of performance and satisfaction. Study
by Ochse (2001) on university students revealed that over-optimistic self-perceptions and high expectations may in fact be maladaptive whereas, humble self-assessments may be more conducive to success. Ruthig et al. (2007) reported that among college students optimism paired with perceptions of academic control may enhance performance and well-being; optimistic bias in the absence of perceived control may result in disappointment, poor performance and diminished well-being. Rand (2009) in his study on university Psychology students found that neither hope nor optimism had direct influence on academic performance. In contrast, the shared aspect of hope and optimism (goal attitude) had a direct influence on academic performance.

4.6.4 Relationship between Achievement Motivation and Anxiety

Study by Putwain and Symes, (2012) revealed that competence beliefs were inversely related to the worry and tension components of test anxiety, both directly and indirectly. Academic intrinsic motivation has been shown to be positively and significantly related to students’ achievement and perception of their academic competence, and inversely related to their academic anxiety (Eskelis-Gottfried et al., 1998). According to Elliot and Harackiewicz (1996) performance goals instill perceptions of threat which create anxiety and pressure. Study by Lee Ashford and Jamieson (1993) and Owayed (2005) found negative relationship between achievement motivation and anxiety.

4.6.5 Relationship between Achievement Motivation and Optimism

One of the key aspects of motivation is to feel optimistic, and possess hope that effort will bring benefits. The ability to motivate oneself is interconnected with intellectual ability and temperament but it is not fixed and varies over situations. Another term for motivation is ‘willpower.’ Willpower is not something that we do or do not possess. It is based on a conviction of, ‘I can and I will, and I am determined to do so.’ It is a choice, although for some this is not an easy or clear choice. Study by Lee, Ashford, and Jamieson (1993) has revealed that optimists have better stress coping strategies and higher achievement striving. In their study interaction of achievement striving and optimism was negatively related to anxiety. Also, achievement striving was positively related to problem-focused coping. According to Logue et al. (2007) academic motivation is highly related to major satisfaction, conscientiousness, emotional stability and optimism.
4.6.6 Relationship between Achievement Motivation and Academic Performance

Of the many variables found to be related to academic achievement, motivation has consistently been identified as one of the strongest predictors (Allen et al., 2008) because it promotes feelings of competence and self-worth in an individual. Deci et al. (1991). In fact, several researchers have suggested that only motivation directly affects academic achievement; all other factors affect achievement only through their effect on motivation (Tucker et al., 2002). However, it is not as easy to understand what motivates students. Achievement motivation is a widely researched topic and it has been correlated with academic self-concept (Marsh & Ayotte, 2003), academic self-efficacy (Bong & Skaalvik, 2003) and personality traits (Mandel & Marcus, 1988). Studies on achievement motivation indicate that students with a higher need to achieve perform better than those with a lower need to achieve (Onwuegbuzie, et al., 2001; Stoeber & Rambow, 2007). Study by, Johnson (1996), Sandra (2002), Broussard & Garrison, (2004) and Skaalvik & Skaalvik (2006) revealed significant relationship between academic performance and motivation. However, study by Bakar et al. (2010) revealed a negative relationship between achievement motivation and academic performance among university students, but a positive correlation was observed between students’ attitude and academic performance.

4.6 Teacher Effectiveness

Since there is clearly a shared responsibility between the teacher and the student as to what a student learns, there is a need to work upon both aspects i.e. students’ variables for learning and teachers’ variables for effective teaching. The most accepted criterion for measuring good teaching is the amount of student learning that occurs. However, despite the fact that what a student learns is not always within the teachers’ control, the literature on teaching is full of well researched ways that teachers can present content and skills that will enhance the opportunities for students to learn. To impart education three interwoven elements are involved – subject matter, student and teacher. Out of these, teacher is equally important because he is the one who induces the desired knowledge in students. Some teachers are skilled by birth and others can be trained to desired skills because psychologists claim that behaviour is modifiable. Therefore, teaching process can be developed and improved to prepare effective teachers because required type of behaviour is a must for effective and efficient teacher.
The definition of teacher effectiveness is subjective, implying that it can be different for different people. The results of several studies provide a general consensus about some apparent dimensions of teaching effectiveness (Feldman, 1997; Arreola, 2006; Burdsal & Harrison, 2008; Perry & Smart, 2007). These include the teacher’s (1) knowledge of the subject matter (2) preparation and organization of the course (3) sensitivity to and concern for students, (4) fairness in grading (5) helpfulness (7) elocutionary skills (8) class management (9) the effectiveness of instructional aides (textbook, etc.) and (10) the clarity of course objectives.

Marsh and Dunkin (1997) carried out definite review of the massive literature on the use of student evaluations and their relation to teaching effectiveness. He identified workload, teachers’ explanation, empathy (interest in students), openness and the quality of assessment procedures (including quality of feedback) among his nine dimensions of effective instructions at university level. They also reported that there is an agreement between lecturers and students on the characteristics of good teaching in higher education despite that fact that lecturers are usually more generous in their ratings of themselves. According to Ramsden (1991) the key factors defining “good teaching” in higher education on which students are validly able to comment are: concern for and availability to students, enthusiasm and interest of teachers, clear goals and objectives, feedback on learning, the encouragement of student independence and active learning, an appropriate workload and relevant assessment methods and provision of a suitably challenging academic environment.

Hussin, Jusoff and Omar (2008) examined the perceptions among students towards lecturers teaching quality determinants from three public universities in Malaysia. A field survey among students from different field of studies (Social Sciences and Pure Sciences) was conducted through a questionnaire. The data were factor-analyzed to determine the key dimensions of lecturers’ teaching quality. The result shows that seventeen dimensions, namely: clarity, practicality, exercises, attention, enthusiasm, creativity, feedback, syllabus, motivation, extra reading, availability, technology, punctuality, current issue, approachability, language use, and communication skills were perceived by the students which discriminate between lecturers in terms of their teaching performance. In the present study, teacher effectiveness has been defined as (1) having good academic and professional knowledge with a clear concept of the subject matter (2) good preparation of the lesson with clear objectives (3) organized and systematic presentation of the concepts with proper
learning materials (4) ability to communicate his/her knowledge to the students successfully (5) classroom management (6) positive attitude towards students (7) result feedback accountability and (8) ability to understand and motivate students.

4.6.1 Enhancing Teaching Performance

Sejits, Taylor & Latham (1998) argued that the combination of goal-setting, information seeking and receiving feedback will enhance classroom performance. If faculty members are truly committed to becoming more effective teachers, they should set learning goals, proximal goals, behavioural goals or a combination of goals. Commitment to these goals will be optimized when faculty hold beliefs those contribute to high self-efficacy and when outcome expectancies are personally valued. Furthermore, individuals need to seek behaviour based feedback that facilitates the realization of goals and effective self-management. The policymakers are well aware that the quality of teaching is the most critical factor contributing to student learning. To make improvements in students' performance there is a need especially to have highly effective teachers, particularly in medical and technical education, capable of teaching rigorous content of such courses considering variables that influence students learning. Researchers suggest that attributes of a teacher are as vital as subject matter expertise for effective teaching. Therefore, along with the subject expertise the faculty members need to focus on their attributes as well.

4.6.2 Students’ Feedback for Teacher Effectiveness, Performance Measurement and Professional Development

During the 1970s many universities began using student evaluations of teaching performance for performance appraisal purposes (Centra, 1993). Although, their validity, the techniques used to administer them and the purposes for which they are used remain controversial (Marsh, 2007; Pallett, 2006), student feedback is now an important component in the formal faculty performance appraisal systems in most of the universities (Burdsal & Harrison, 2008). However, faculty opinions on the use of student evaluations range widely. Many researchers have expressed reservations about their use in faculty performance appraisal systems. A common concern is the possibility that factors other than teaching effectiveness influence the evaluation scores (Mason, Edwards, Roach, 2002; Benton & Cashin, 2012). These include the procedures used to administer the evaluations (Feldman,
whether the course is required or elective, class meeting time, class size (Hoyt & Lee, 2002), the course workload and students motivation (Marsh, 2007). Researchers have also found difference in students rating of teacher effectiveness based on academic disciplines with mathematics and science courses tending to receive lower ratings (Centra, 2009).

Expected grades and grading standards of faculty members with the possibility of instructors showing lenient grading standards receiving higher overall rating (Centra, 2003, Trout, 2000) and students’ prior interest and pre-existing student perceptions about a particular instructor or course might also affect student evaluation scores (Murray, 2007). Another question is whether students take the evaluations seriously. Mason, et al. (2002) reported that students sometimes even tend to view the evaluations as a chance to “let off steam” by collectively assigning low ratings. Although Rice et al., (2000) accept student evaluations as a valuable tool for assessing and improving classroom teaching, they argue that these evaluations do not capture information about long-term instructor and course effectiveness.

Study by Layne (2012) on difference in students and faculty members’ perception from various academic disciplines has revealed some very interesting facts. Faculty members are 2 to 3 times more likely than students to define an effective teacher as someone who does the following: 1) loves the subject and knows the subject material well, 2) uses a variety of teaching methods or formats, 3) uses language that students can understand or relate to, 4) motivates students to do well in the course, 5) outlines course expectations clearly and accurately, 6) relates the materials to the students’ lives. Faculty members are 4 to 5 times more likely than students to define an effective teacher as one who: 1) encourages questions and feedback from students, 2) learns alongside students and 3) is organized and well-prepared for class.

Students, on the other hand, are 2 to 3 times more likely than faculty to define an effective teacher as someone who does the following: 1) understands the stress students are under, 2) interacts with students and takes a hands-on approach to the subject and 3) gets students interested in the subject. Students are 4 to 6 times more likely than faculty to define an effective teacher as someone who 1) is patient and flexible when dealing with students’ problems, 2) gets to know students and relates to students’ lives, 3) has a sense of humor and 4) clearly indicates what material will be on tests. Most impressive of all, students are 12.1 times more likely than faculty members to define an effective teacher as someone who
keeps students interested for the whole class period and makes the class enjoyable. The findings of Layne’s study support more students oriented than subject-oriented descriptors rating highly among student responses while the faculty member are more subject-oriented overall. This shows that instructors differ quite significantly from students in their perception of teacher effectiveness.

Contrary to the researchers who question the validity and reliability of student evaluations, a considerable proportion of researchers (Koon & Murray, 1995; Centra 2003; Marsh 2007) conclude that the student evaluations provide a valid and reliable method for judging teaching effectiveness in comparison to peer evaluation. This is because students see a great deal of teaching, they are in an unrivalled position to judge whether the instruction they receive is helping them to learn. One of the most rigorous reviews by Marsh (1997) rejects peer review completely as peer ratings of teaching performance are highly susceptible to prejudice and are often inaccurate. According to Ramsden (1991) peers have scanty and biased knowledge of their colleagues’ teaching abilities. The existence of a positive relation between student evaluation and student achievement supports the validity of student ratings and there is no other single measure of teaching performance which is potentially valid.

4.7 Occupational Stress among University Teachers

Johnson et al. (2005) examined occupational stress across a number of different occupations. These authors identified six occupations (out of 26 included in the study) as being the most stressful regarding poor health and lowered job satisfaction. These occupations were: ambulance, teachers, social services, customer service, call centres, prison officers and police. Singla (2006) during her study on occupational stress among employees from different careers found that doctors and teachers are highly stressed as compared to the employees from other professions. With increasing competition teachers are showing symptoms of burnout, which directly or indirectly affect their teaching performance (Shukla & Trivedi, 2008). Previous research on teachers’ occupational stress has focussed mainly on school teachers. Research on stress among university teaching staff has received attention only in last few years, and in India it is still sparse especially in the field of medical and technical education.

Gillespie et al. (2001) examined staff perceptions of occupational stress in universities. These authors highlighted the fact that traditionally university teaching has been regarded as
a low-stress occupation; however with the increased workloads, reduced resources and pressure of producing good results due to tough competition this is no longer the case. A series of focus groups conducted in a number of universities across Australia identified high levels of occupational stress among university staff, with a significant proportion of staff reporting debilitating levels of stress. The university staff identified the consequences of stress as a decrease in the quality of education and research (Gardner, 2005).

A similar study was undertaken within 14 universities in UK by Tytherleigh et al. (2005). In comparison to normative data, the university staff was highly stressed, particularly by work relationships, lack of control and resources, communication, work overload and pay and benefits, and they also tended to suffer more from psychological ill health. In a national survey of occupational stress in Australian universities, Winefield et al. (2002) reported that over 50% of the 8,732 university staff who participated in this study was at risk of psychological illness, compared with only 19% of the Australian population as a whole. Winefield and colleagues highlighted diminishing recourses, increased teaching loads and student-staff ratios, job insecurity, pressure to attract external funding, poor management and a lack of recognition as key contributors to occupational stress in universities.

Reddy and Poornima (2012) studied occupational stress and professional burnout of 955 university teachers from nine state universities in South India (Tamil Nadu and Andhra Pradesh). The results revealed that 74% of the university teachers experienced moderate to high levels of occupational stress and 86% of teachers showed professional burnout. Study by Azeem and Nazir (2008) to investigate the level of professional burnout among the university teachers found that they have high levels of emotional exhaustion. Similar finding was revealed by Pandey and Tripathi (2001) when they examined the level of perceived occupational stress and burnout in 56 male teachers of an engineering college.

4.8 Relationship between Emotional Intelligence, Occupational Stress and Teacher Effectiveness

4.8.1 Relationship between Occupational Stress and Teacher Effectiveness

Gallen, Karlenzig and Tamney (1995) explored the complexity and diversity of teachers’ work, clearly linking workload and stress not only to the quantity of hours worked, but also to the diverse nature and demands placed on teachers. Study by Muthuvelayutham &
Mohanasundaram (2012) on 422 engineering faculty members on job satisfaction and job involvement in selective engineering colleges affiliated to Anna University, Trichy, found that there is a considerable level of impact of stress on job satisfaction and job involvement among teachers. Researchers have reported that prolonged teacher stress contributes to job dissatisfaction, reduced teacher-student rapport, and decreased teacher effectiveness in meeting educational goals. Dissatisfied faculty can transfer their emotions to other employees (Westman, & Etzion, 1999). At a personal level teaching related stress can affect a teacher’s health, well-being, and performance (Larchick & Chance, 2004). From an organisational perspective, it translates to unproductive employee behaviours such as alienation, apathy and absenteeism (Gugliemi & Tatrow, 1998). Stress affects both the teacher and the learners in the teaching process (Forlin, Douglas & Hattie, 1996).

4.8.2 Relationship between EI and Occupational Stress among Teachers

Although many studies have been conducted to find the stress and its relationship with EI among the employees of various organizations, but research on this issue among the faculty members in higher education is scanty. Adeyemo and Ogunyemi (2005) in their study on University academic staff found that EI and self-efficacy contributed significantly to the prediction of OS. Study by Ismail et al. (2009) on academic employees who worked in private institutions of higher learning in Kuching City, Malaysia, showed that relationship between OS and EI significantly correlated with job performance. Salami (2010) in his study on a sample of 420 secondary school teachers from Southwest Nigeria found that OS was negatively related to psychological well-being and EI (moderator variable) served as protective factors for teachers who experienced OS. Akomolafe (2011) found a significant difference between the OS of secondary school teachers with low and those with high EI.

4.8.3 Relationship between EI and Teacher Effectiveness

Smith (1997) asked the opinion of students what qualities should the ideal teacher in higher education have, and found that interpersonal characteristics such as ‘empathic’, ‘approachable’ and ‘relates to students as equals’ were woven in with attributes relating to the lecturer’s skills and knowledge. Carson (1996) gathered the responses of former students, who graduated over a period of 26 years, about teachers whom they perceived to be most effective. She found that the single quality the students most frequently associated
with effective teachers – more often than brilliance and love of subject and even more often than enthusiasm in the classroom, was a special attitude toward students and relationship with them. Based upon the findings of their study Penrose, Perry and Ball (2007) contend that enhancing teacher’s EI may increase teacher efficacy and subsequently lead to improved student achievement. Haskett (2003) found a significant link between specific EQ competencies, and behaviors of effective teaching in higher education.

Spergel (2008) in her study on ‘The Impact of Teacher’s Behaviours, Personality Characteristics and Skills on Students’ Motivation to Learn’ found that the participants clearly voiced the necessity for a combination of subject knowledge, positive behaviours, personality characteristics as well as skills like – Ability to listen; Create an atmosphere conducive to learning that interests the students; Able to connect with students; Non-judgmental & Genuine; Takes out time to get to know his/her students; Is very engaging, adaptable, flexible and gives the students a chance; Level-headed; exudes a great sense of humour; Optimistic, Positive, Smiling ; Promotes active and collaborative learning; Understands individuality that every student is different and is able to treat them all fairly.

In their study Hall & West (2011) examined the relationship between common standards, such as college Grade Point Average (GPA), American College Testing (ACT) scores and Praxis exam scores (knowledge of specific academic content) with student teacher performance at a large, private university. Additionally, this study examined relationship between EI and student teacher performance. They found that GPA and Praxis scores correlated significantly and positively with final student teaching performance scores but no statistically significant relationship was found between total EI and final student teacher performance scores. This could be probably because the sample was of student teachers who did not have enough teaching experience in handling actual class room situations. However, their study demonstrated important connection between understanding emotions, communication knowledge, dispositions and performances.

A teacher needs awareness of his/her feelings, values and attitudes as a teacher, awareness of his/her behavior and how others see them (Palmer, 1998). Consistent and constructive feedback from students, colleagues and authorities facilitates a teacher in better self-evaluation of his/her abilities. Those with good EI have no hesitation in taking feedback from others and then working upon it to continuously evolve their performances. Teachers
with high EI competencies are optimistic, adaptable, collaborative, confident, authoritative, open, approachable and enthusiastic (Mortiboys, 2005). They have better communication skills, better abilities for conflict resolution (Ming, 2003) and problem solving, better impulse and self-control and higher self-esteem. With higher level of motivation they are more assertive, more responsible and cope better with stress (Salami, 2010). Teaching styles and communication pattern affect students’ attributions. When teachers are supportive and emphasise the teaching learning process and give constructive feedback, students tend to be motivated to achieve success (Daniels, Kalkman, & McCombs, 2001).

4.9 Conclusion

Pursuing higher education is considered to be stressful. Literature review presented in this chapter has attempted to outline the significance of EI in academia, as teaching and learning process is full of emotions. Curriculum wise medical and engineering courses are quite demanding which quite often creates anxiety among these students. The research literature indicates that high anxiety among students may affect their academic performance. Optimism and achievement motivation as EI competencies among students may help in reducing anxiety and enhancing their academic achievement. The chapter also reviews important motivational factors among students. Research literature indicates that the students are motivated by multiple factors. Teaching and learning are integrated process; therefore it is important for the faculty members and the students themselves to understand the emotional and motivational aspects of learning for better academic performance.

Conventionally it has been believed that stress among university staff is not high. However, the literature review reveals that with changes in higher education system it not the case. Research literature reveals a significant relationship between EI, occupational stress and teacher effectiveness. The conceptualization of EI has opened the floodgates for researchers in the past two decades to suggest what EI can and cannot predict, particularly in relation to individual and organisational success. However, a noticeable gap in the research literature emerged, as the role of emotions was evaluated in higher education and particularly in medical and engineering education. Therefore, the current thesis aims to systematically investigate the extent to which being able to effectively deal with emotions arising in teaching-learning process relates to the experience of better teaching-learning outcomes.
4.10 RESEARCH GAP

1. Despite many studies showing the usefulness of EI in a teaching learning environment, very few researchers have explored the role of EI in teacher effectiveness for medical and engineering education, especially when the courses related to these two fields are quite stressful.

2. While the role of EI in leadership and corporate working has been extensively studied, few researchers have investigated the role of EI in higher education. In academia research on EI was limited mostly to school education. Not much literature could be found on EI, occupational stress and teacher effectiveness among medical and engineering faculty members. More so, in Indian context there was none.

3. While many studies have aimed to assess the prevalence and associated factors of anxiety, stress and depression among medical and engineering students, very few studies have tried to explore the attributes which could help them in dealing with the emotional aspects of learning. Therefore, the current thesis aims to systematically investigate the extent to which being able to effectively deal with emotions arising in teaching-learning process relates to better teaching-learning outcomes.

4. A number of studies have been conducted on achievement motivation among school students and other undergraduate students. Not much literature is available on achievement motivation among medical and engineering students especially in Indian context. As these students have to face tough competitions right from their college admission to job placements or further studies, it is important for college authorities, faculty members and students themselves to understand the significance of their motivational aspects.

5. Studies in the past have focussed either on learning aspects i.e. students variables or teaching aspects i.e. teachers variables. As teaching and learning are integrated process, studying students and teachers variables together gives a holistic understanding of teaching-learning outcomes. Also, the most accepted criterion for measuring good teaching is the amount of student learning. Therefore, it becomes necessary for the faculty members to understand various aspects of learning and especially the emotional aspect, as it is generally ignored in higher education.
6. Given the paucity of research that investigated the significance of EI and its competencies in medical and technical education, there is a need to fill the organizational, geographical and cultural gaps in this regard. This could help in analysing the need for a customized EI Intervention Programmes for students and the faculty members of medical and engineering colleges.