Chapter 5

**FINDINGS AND DISCUSSION**

The basic purpose of a scientific research activity is to relate the observed facts (i.e. immediate discovery) to some organizations of a system. It amounts to what Arieti (1976) names, individualizing some underlying commonality or connection between things hitherto deemed dissimilar or unrelated. If, however, some of the observed facts do not seem to fit in a system, such apparent contradictions should be explainable with valid reasons. When the observed facts are related to a system, “the immediate discovery may lead to additional properties hidden in the class or system” (Arieti, 1976). It then, becomes an innovation.

This humble piece of research does not attain that lofty ideal of innovation. It merely tends to correlate well-being and achievement goals with emotional intelligence.

In this chapter an effort has been made to explain various observations in the light of theoretical orientation of emotional intelligence, well-being, and achievement goals. Secondly, the results are discussed to show how these findings are concurrent with the empirical studies already conducted in the field, if any. At places, where the observations did not concur the findings of other investigators, attempts have been made to fathom plausible reasons for these disagreements.

**Main Findings**

1. Well-being (general and school-related) was found to be significantly and positively related with emotional intelligence.

2. Achievement goals were found to be significantly and positively related with emotional intelligence. At sub-variable level a significant negative correlation was found between students’ disruptive behavior and emotional intelligence, and no relationship was found between personal performance avoidance goals and emotional intelligence.

3. A positive and significant relationship was found between emotional intelligence and academic achievement.
4. Social skills and self-awareness were found to be significant predictors of general well-being.

5. Social skills, social awareness and self-management were found to be significant predictors of school-related well-being.

6. Self-management and social skills were found to be significant predictors of achievement goals.

7. Self-management was found to be significant predictor of academic achievement.

8. Students having high emotional intelligence were found to be having better well-being, achievement goals and academic achievement as compared to students having low emotional intelligence.

9. Emotional intelligence was found to be significantly influenced by socio-demographic variables- gender, parents' education, monthly income of family, area of residence (rural/urban) and school attending (public/ordinary).

10. General well-being was found to be significantly affected by socio-demographic variables- parents' education, monthly income of family, area of residence (rural/urban) and school attending (public/government) and caste.

11. School-related well-being was found to be significantly affected by socio-demographic variables- gender, parents' education, monthly income of family, area of residence (rural/urban) and school attending (public/ordinary) and caste.

12. Achievement goals were found to be significantly affected by kind of school attending (public/ordinary).

13. Academic achievement of students were found to be significantly affected by socio-demographic variables- gender, parents' education, area of residence (rural/urban), school attending (public/ordinary) and caste.

Discussion

The present study seeks to explore relationship among emotional intelligence, well-being, achievement goals and academic achievement, as well as, the impact of socio-demographic variables viz. gender, parents’ education, monthly income of family, area of residence (rural/urban), kind of school attending (public/ordinary) and caste on emotional intelligence, well-being, achievement goals and academic achievement. Therefore, the study was designed to be correlational to explore the strength of
relationship among all variables. In this section the results obtained are discussed in the context of existing research and conclusions are drawn.

One of the objectives of the study was to determine, at least in a preliminary way, the relationship among emotional intelligence, well-being (general well-being and school related well-being), achievement goals and academic achievement. The results indicated that well-being is significantly related with all the four variables viz. self-awareness, self-management, social awareness and social skills of emotional intelligence. However, emotional tone, a component of general well-being is not related with social awareness. Furthermore, self-management, social awareness and social skills are significant predictors of well-being. The result of relationship between emotional intelligence and general well-being complements the studies conducted by Greven, Chamorro-Premuzic, Arteche, & Furnhem, 2008. Gasper & Bramesfeld (2005) who found positive relationship between positive feeling and emotional intelligence and well-being. The relationship between emotional intelligence and emotional tone is also reported by Denhem, 1998; Izard, 2001; Izard et al., 2001; Saarni 1999. The relationship between emotional intelligence and peer relations, another variable of general well-being is also supported by Coie, Lochman, Terry & Hyman, 1992, Pederson, Vitaro, Baker & Borg 2007. The students with high level of emotional intelligence enjoy better peer relations is in consonance with Ciarrochi et al., 2001b; Mavroveli, Petrides, Sangareau and Furnham, 2009 and have better self efficacy is supported by Petrides, Niven, & Mouskounti, 2006; Parker and Asher, 1993.

Another objective of the study was to explore the relationship between emotional intelligence and achievement goals. A significantly positive relationship was found among all variables of emotional intelligence and achievement goals except Students’ disruptive behavior which is negatively related with emotional intelligence and personal performance avoidance goals have no relationship with emotional intelligence. Spence, Oades and Caputi (2004) argued that trait emotional intelligence and adoption of congruent personal goals are related processes. Stufft (1996) implies that low emotional intelligence is directly related to disciplinary problems. Petrides, Frederickson, and Furnham (2004) also reported negative correlations with unauthorized absences and exclusions from school. Brackett et al. (2004) also found negative correlations with
deviant behavior and poor peer relations. **Trinidad and Johnson (2002)** also reported a negative association between emotional intelligence and deviant behaviors (tobacco and alcohol use) in an American sample of adolescents. **Martinez-Pons (1997)** found positive correlation between mastery goals and emotional intelligence. Self-management and social skills are significant predictors of achievement goals.

A positive relationship was found between emotional intelligence and academic achievement. Moreover, self-management is significant predictors of academic achievement. Recently, a small body of empirical research has emerged to suggest that there is merit to the idea that emotional intelligence is associated with academic achievement—as long as careful attention is directed at the methodology for assessing emotional intelligence and achievement variables (Parker, Summerfeldt, Hogan, & Majeski, 2004). **Petrides, Frederickson, and Furnham (2004)** examined the relationships among emotional intelligence, cognitive ability, and academic performance in a British sample of 650 Grade 11 students. They found that emotional intelligence moderated the relationship between academic performance and cognitive ability. **Parker et al. (2004)** also found that various emotional intelligence dimensions were predictors of academic success. **Parker, Summerfeldt, Hogan and Majeski (2001, 2004)** discovered that various emotional and social competencies were strong predictors of academic success. **Low and Nelson (2004)** reported that emotional intelligence Skills are key factors in academic achievement of high school and college students respectively.

Another objective of the study was to explore the influence of socio-demographic variables viz. gender, parents’ education, monthly income of the family, area of residence (rural/urban), school attending (public/government) and caste on emotional intelligence, well-being, achievement goals and academic achievement. The results indicated that male and female students differ significantly on emotional intelligence scores. EI scores of females are higher than males. If we see at sub-variable level females are significantly better than males on self-awareness and self-management, however, there is no significant difference between males and females on social-awareness and social skills. **Allen (2003)** indicated that female principals tend to slightly outscore male principals on the EQ-i by one-half of a standard deviation. Other studies also suggest females score higher than males on tests of emotional intelligence (Mayer, Caruso, & Salovey, 1999;
Mayer & Geher, 1996). Women have been found to display more complexity and articulate their emotional experience more than men (Barrett, Lane, Sechrest, & Schwartz, 2000). Lopes, Salovey, and Straus (2003) confirm this finding and suggest higher emotional intelligence in women may be linked to mother-child interactions where female children tend to receive greater emotional expression from their mothers than male children. Hoffman, 1977; Hojat et al., 2001, van Rooy et al., 2005 also confirmed gender differences in emotional intelligence and empathy. Male and female students differ significantly on school-related well-being and academic achievement. Female students have better affect at school, perceived academic efficacy and academic achievement. Male students are more disruptive in the classroom and female students prefer performance goals.

Parents’ education influences the development of emotional intelligence in students. It was found that children of highly educated parents (graduate and above) have better scores on all the four variable of emotional intelligence and differ significantly form children of less educated parents (up to undergraduate level). Lopes et al. (2003) also reported positive relationship of emotional intelligence and parents support. Parents’ education, especially mother’s affects the well-being and academic achievement of the students. Children of educated parents (graduate and higher) reported better well-being, achievement goals and academic achievement than children of less educated parents (up to undergraduate level). Research literature has reported that learning outcomes (academic achievement and academic performance) have been determined by such variables as; family, school and society (Aremu & Sokan, 2003; Aremu & Oluwole, 2001; Aremu, 2000). Parent’s involvement in the education of the children significantly improves their academic achievement (Tella & Tella, 2003; Campbell, 1995; Rich, 1987). Rasinki and Fredrick (1988), Zang and Carrasquillo (1995) and Cotton and Wikelund (2005) remarked similarly that parents play an important role in children’s learning.

Another socio-demographic variable, which influences the development of emotional intelligence, is monthly income of the family. It was found that students from high monthly income group (> 15000) have done better than students from low monthly income group (< 15000) on all the four variables of emotional intelligence and well-
being. Exposure plays an important role in the development of emotional intelligence. Monthly income of the family affects the facilities and resources available to the students.

Area of residence (rural/urban) also affects the development of emotional intelligence, well-being and academic achievement. Urban students were found to have better emotional intelligence, well-being and academic achievement as compared to rural students. They differ significantly on all the four sub-variables of EI. Though there is no significant difference among rural and urban students on achievement goals but at sub-variable level rural students reported more disruptive behavior and urban students have better goal orientation. Exposure to the world, facilities and resources available to urban students are better than rural students. Therefore, their emotional development, well-being and academic achievement are better than their rural counterparts.

School is also an important factor in the development of emotional intelligence. Students studying in public schools were found to have better emotional intelligence than the students of ordinary/govt. schools. Even school also affect students’ well-being and goal orientation. Students of public schools have better well-being, goal orientation and academic achievement. Ordinary/govt. school students are more disruptive in the class. The possible reason for this difference between these two groups of students is the school environment. Public schools demand much from the teachers. Tutorials, seminars, guest lectures and group discussions are a common feature in these schools where better interaction takes place between the teacher and the taught which may help in development of EI, well-being and goal orientation.

Castes of the students affect the well-being and academic achievement of the students but it does not affect emotional intelligence and achievement goals of students. General category students have better well-being and academic achievement. Reserved category students are more disruptive in the class. This difference may be because of better facilities, resources and environment available to general category students.

Another significant finding of the study is that there is positive relationship between achievement goals and well-being except students’ disruptive behavior, which is negatively correlated. Personal goals play an important role in the maintenance of well-being (Emmons, 1996). Several other researchers have noted the importance of setting goals for well-being (Kasser & Ryan, 1993; Sheldon & Kasser, 1995). McGregor and
Little (1998) found that people feel better when they are doing well (efficacy). The results are also in agreement with the studies presented by several other researchers (Ames, 1992; Maehr, 1991; Maehr & Midgley, 1991). Pursuing mastery goals was found to have a significant positive relationship with general well-being. Findings suggest that goal orientation is related to emotions and cognitions that not only contribute to effective learning but which also relate to psychological well-being more generally. Task goals are more likely to facilitate learning and school achievement. For this, and perhaps other reasons as well, task goals also contribute to psychological well-being. These findings could be and in fact were anticipated on the basis of generalizations and explorations from previous research (Covington, 1992).

Perhaps of greater interest is the initial, but not unimportant, suggestion that well-being might stem from perception of mastery and performance goal emphases reflected in school policies and practices. In general, the effects of perceived emphases on task goals seemed to be weaker or more limited in nature than those associated with a perceived emphasis on ego goals. Of particular interest, is that both mastery and performance goals emphases were associated with report of disruptive behaviour. However, mainly, the results of analysis support the notion that the school environment as perceived by students, figures significantly and importantly in the sense of well-being and can contribute to behaviour and affect that facilitates a positive orientation toward life generally.

In nutshell, emotional intelligence and socio-demographic variables play an important role in well-being, achievement goals and academic achievement of students.

Educational implications

This study examined relationship among emotional intelligence, well-being, achievement goals and academic outcomes for high school students. The results support that students with high EQ tended to have better well-being (general well-being, school-related well-being), achievement goals and academic achievement. This suggests that integrating lessons on socio-emotion learning in schools might improve students’ performance, decrease disruptive behavior (Guil, Gil-Olarte, Mester & Nunez, 2005, Guil, Mester & Gil-Olarte, 2004). Researchers at Yale University tested the effectiveness of emotional literacy in the middle school and found positive results (Maurer, Brackett,
Schutte and Malouf (2002) found that a course with a focus on emotions and the application of emotional skills gives first-year students resources that may be helpful in coping with academic and social adjustment challenges. Their findings indicated greater retention rates for students who participated in a freshmen transition course focused on emotions than students who did not receive such a course. Qualter, Whiteley, Morley and Dudiak (2009) also reported that emotional intelligence-based intervention programme, demonstrating that students, who show an increase in emotional intelligence, are more likely to persist with their studies. Elias et al. (1991) emphasized that teaching emotional and social skills is very important at school; it can affect academic achievement positively not only during the year they are taught, but during the years that follow as well. Teaching these skills has a long-term effect on achievement. Richardson and Evans (1997) explored some methods for teaching social and emotional competence within a culturally diverse society. Their purpose was to help students connect with each other, in order to assist them in developing interpersonal, intrapersonal and emotional intelligence, arguing that these intelligences are essential for personal accomplishment.

Finegan (1998) argues that schools should help students learn the abilities underlying emotional intelligence. Possessing these abilities, or even some of these, "can lead to achievement from the formal education years of the child and adolescent to the adult’s competency in being effective in the workplace and in society" (p.23). The emotions, feelings and values are vital for a person’s well-being and achievement in life. According to Edigar (1997). He also states that science teachers should stress on the affective domain that cannot be separated from the cognitive domain. Quality emotions and feelings help students give their best potential in the classroom. The students, who are averse and think negatively, cannot concentrate for a long time and have more difficulty in reaching their potential than others. In nutshell, a child’s emotional life has an impact on child’s academic success and social adaptation both in and out of the classroom (Gardner, 1993; Pekrun, 1992). In the light of above discussion this study also supports the need of a curriculum which is helpful in socio-emotional development of students.

There appears to be a double reason for pursuing mastery and avoiding performance goals. Equally, if not even more interesting, there seems to be a double
advantage when schools avoid being seen as emphasizing performance goals- and are viewed as emphasizing mastery goals. Mastery goals are associated with positive learning and positive feelings about oneself and one's world. Emphasis on performance goals seems likely to create problems in learning as well as in the life of the person more generally. This may be a particularly interesting and important issue in the life of the young adolescent who is characteristically conscious of self, often worried about ability, and perhaps especially inclined towards social comparison. Schools that emphasize and exacerbate the focus given to the performance goals are likely to create not only problems in learning, but also "behavioural problems." And more generally, they are likely to undermine emotional well-being. Of course, one study does not make a principle, in particular when one deals only with students' perceptions. But as the results confirm what might have been anticipated from previous work on goal orientations, they should be taken seriously in considering the effects of school practices on the life of young adolescents. So it is requested that the teachers should take care of classroom structures and emphasize mastery goal orientation and democratic environment.

**Suggestion for further research**

While the investigator deems the findings of the present study, obviously caution in adopting them is warranted due to several limitations. First, the relative small size of the sample prevents us from making stronger claims about the generalizability of these findings. Second, the correlational nature of the data, which were collected at one time point, limits the interpretation with regard to the processes involved. Nevertheless, extrapolations from the data, when supported by theory, can provide suggestions for directions in future investigations.

The present study raised a number of interesting questions for future research: Why was emotional intelligence predictive of well-being and achievement goals, but not students' disruptive behavior. Why does emotional intelligence predict academic achievement? It is possible that students who are better able to manage their emotions (one component of emotional intelligence) are more effective at controlling anxiety and focusing their attention in school, which helps them to achieve higher scores. Moreover, students with higher emotional intelligence may report better well-being because they are more perceptive of their own and others emotional states; these students have the
vocabulary to discuss their own and others feelings and are more effective at handling conflict. Only future research will help us to answer these questions.

Further, recent literature has shown that gaps in emotional intelligence skills affect students both inside and outside the school context (Brackett, Rivers, Shiffman, Lerner & Salovey, 2006; Ciarrochi, Chan & Bajgar, 2001; Extremera & Fernández-Berrocal, 2003; Mestre & Fernández-Berrocal, 2007; Sánchez-Núñez, Fernández-Berrocal, Montañés & La-torre, 2008; Trinidad & Johnson, 2002). With these in mind, however, the investigator sees promise in the directions that these findings suggest.

Conceptualizing the appraisals of school environment in goal emphases terms could be a useful way of examining the role that such environments play in adolescents' lives. That is not new of course. Considerable work has already suggested that task and ego goal emphases in school affect motivation and achievement. What is in the results of present study is a basis for suggesting that school goal emphases that positively affect motivation and achievement also affect adolescents' well-being more generally. The patterns of finding in this regard move us further along the path of proposing how school context not only are structured but how they should be constructed, at least for adolescents, perhaps younger and older students more generally.

Future research also will need to examine whether emotional intelligence skills can be taught. That is can students increase their score on tests that measure the ability to perceive, use, understand and regulate emotions? Zeidner, Roberts and Matthews (2002) and Gil-Olarte, Palomera Martin and Brackett (2006) urge educators to validate emotional literacy programmes.

Another area of interest can be emotional intelligence of teachers and students' academic achievement, well-being and goal orientation. Emotional intelligence of teachers and classroom environment can be explored. Of course, these findings can be replicated and certain of the interrelationships explored further. But a beginning of importance in this regard in Indian context, the investigator feels, has been made.