Chapter 6

SUMMARY

The term "emotional intelligence" was first coined by Salovey and Mayer (1990) to explain a different type of intelligence. Many have noted the distinction between academic intelligence and social intelligence (Neisser, 1976). While the standard intelligence quotient (IQ) tends to be static, emotional intelligence can be learned (Salopak, 1998). Specifically, emotional intelligence is the ability to perceive accurately, appraise, and express emotion; the ability to understand emotion and emotional knowledge; and the ability to regulate emotions to promote emotional and intellectual growth (Mayer & Salovey, 1997). In an earlier conception, Gardner (1983) described what is now recognized as emotional intelligence as being a deep awareness of one's own emotions and the ability to label and draw upon those emotions as a resource to guide behavior.

Salovey and Mayer (1990) categorized emotional intelligence in five domains. Their domains include self-awareness, managing emotions, motivating oneself, empathy, and handling relationships. Goleman (1995) later developed his four dimensions of emotional intelligence to include knowing and managing one's emotions, self-motivation, empathy toward others, and social deftness.

When reviewing the literature, the work of particular researchers often appears. Some of the most recognized authors and a discussion of their works follow. Edward Thorndike is credited with the initial study of emotional intelligence (Goleman, 1995). The term had not yet been coined, but Thorndike (1920) researched dimensions of emotional intelligence as a form of "social intelligence". Howard Gardner (1983) continued to expand the knowledge of interpersonal and intrapersonal skills in the mid-1980s. Marlowe (1986) defined social intelligence as the ability to understand other people and social interactions and to use this knowledge to lead and guide others to mutually satisfying outcomes. Researchers agreed that social intelligence is important for academic and career achievement (Lord, De Vader, & Alliger, 1986; Wentzel, 1991). Walker and Foley (1973) identified two elements of social intelligence. Cognitive skill in drawing accurate conclusions from social interactions and the effectiveness of social
behavior based on such observations express the foundation of social intelligence (Walker & Foley, 1973). Later, Sternberg (1985) concurred with Thorndike's findings stating that social intelligence is not only distinct from academic abilities but is also an integral part of what makes people do well in the practicalities of life. He noted that conventional IQ tests assess only the analytical aspect of intelligence (Sternberg, 1996). Goleman (1995) outlined several dimensions of emotional intelligence. The dimensions included knowing and managing one's emotions, self-motivation, empathy toward others, and social deftness. Knowing and managing one's emotions involves being observant of oneself and the emotions one is feeling as well as handling the feelings appropriately. Goleman described self-motivation as the channeling of emotions in the service of a goal, delaying gratification, and stifling impulses. Empathy speaks to the appreciation of the differences in people and the sensitivity to others' feelings and concerns. It is the ability to comprehend another's feelings and to re-experience them one's self (Salovey & Mayer, 1990). Rogers (1951) considered an act of striving to understand other people and to empathize with them a priceless gift as well as a prerequisite for helping another grow. Goleman portrayed social deftness as the ability to manage emotions in others. Kelly and Moon (1998) defined intrapersonal abilities as personal talents that enable one to take constructive action with respect to both people and tasks. Such abilities help an individual develop self-awareness, capitalize on personal strengths, minimize personal weaknesses, make effective life decisions, and set and achieve goals. Goleman (1998b) reported that virtually all effective leaders have motivation. He also noted that people with high motivation remain optimistic even when the score is against them. Self-awareness is the part of intrapersonal skills that speaks to one's understanding of one's own emotions (Goleman, 1998b). Individuals who experience honest self-awareness also recognize their strengths, weaknesses, needs, and drives. Additionally, these people know how their feelings affect themselves, other people, and their job performance. People who experience a high degree of self-regulation reflect a propensity for thoughtfulness, integrity, comfort with ambiguity, and an ability to say no to impulsive urges (Goleman, 1998b). Goleman (1998c) advocates self-regulation as an important attribute of leaders. Finally, self-awareness and self-regulation help enable an individual to experience positive affect within themselves and others, and so contribute to well-being. Thus, "the
emotionally intelligent person is often a pleasure to be around and leaves others feeling better" (Salovey & Mayer, 1990, p. 201). Variables what role do variables such as age and sex play in the development of emotional intelligence? The developmental nature of emotional intelligence might have some bearing in this study when one considers the age of the participants. Salopek (1998) noted in an interview with Goleman that emotional intelligence abilities are learned and tend to improve as one ages and matures. Mayer et al. (as cited in King, 1999), found that emotional intelligence abilities increased from adolescence to early adulthood. Studies have revealed that gender differences exist in the measurement of emotional intelligence (Mayer et al., as cited in King, 1999, Mayer & Geher, 1996).

The benefits of emotional intelligence are many and varied. A group of four-year old children - found to resist impulse - were tracked through high school and were found to be more self-assertive, socially skilled, independent, and persevering than their more impulsive peers. In addition, they achieved significantly higher SAT scores (Shoda, Mischel, & Peake, 1990). Harrington-Lueke (1997) found in her research that being emotionally intelligent is just as important to success in life as good grades. Essentially, people with high levels of emotional intelligence experience more career success, build stronger personal relationships, lead more effectively, and enjoy better health than those with low levels of emotional intelligence (Cooper, 1997). Bass (1990) found many components of emotional intelligence. The most common factors included social and interpersonal skills, technical skills, administrative skills, leadership effectiveness and achievement, social nearness, friendliness, support of the group task, and task motivation and application.

Needs and significance of the study

Researchers have described the benefits of possessing a high EI. Such individuals are found to be healthier and more successful than their less emotionally intelligent peers (Cooper, 1997). Many characteristics owned by emotionally intelligent people coincide with the characteristics desired in leaders. Emotionally intelligent individuals are found to have strong personal relationships (Cooper), monitor and evaluate others' feelings (Salovey & Mayer, 1990), empathize with others (Kelley & Caplan, 1993), and excel in interpersonal skills (Goleman, 1998a). Review of existing literature suggests that EI plays
an important role in formation of self-concept, setting of goals and their achievement and adjustment. Moreover, researchers are attracted towards the role of EI in leadership and decision making. No significant study has been conducted on EI of students except Lopes et al. who studied relationship of EI with personality and the perceived quality of social relationship. Such a gap in the existing scene of research in the field of EI provides motivation to carry out this study.

Statement of the problem

“A study of relationship among emotional intelligence, well-being and achievement goals at secondary level in Haryana” this study seeks to explore links between emotional intelligence, measured as a set of abilities, well-being, achievement goals and academic achievement, as well as effect of socio-demographic variables on emotional intelligence, well-being, achievement goals and academic achievement of students at secondary level in Haryana.

Operational definitions of terms used

i. Emotional Intelligence is the ability to perceive accurately, appraise, and express emotion; the ability to access and/or generate feelings when they facilitate thoughts; the ability to understand emotion and emotional knowledge; and the ability to regulate emotions to promote educational and intellectual growth (Mayer & Salovey, 1997, p. 10).

ii. General Well-being is a condition of happiness or prosperity and welfare of adolescents in society or surrounding environment in which they live. In the present study General Well-being is comprised of (i) Emotional Tone (i.e. a predominating disposition; especially a frame or condition of adolescent’s emotions), (ii) Peer Relationships (i.e. the extent the adolescent is satisfied with his/her relations to his/her peer group) and (iii) Impulse Control (i.e. the control an adolescent have on his/her sudden or transient mental urge resulting in undeliberated action, caused by the feeling or by some objective stimulus).

iii. School-related Well-being is a condition of happiness or prosperity and welfare of adolescents in school in which they are studying. In the present study School-Related Well-being is comprised of (i) Affect at school (i.e. liking or aptitude of adolescents towards activities of school), (ii) Academic efficacy (i.e. the ability of
an adolescent that he/she thinks he/she posses to produce the results that they wanted to produce in academics).

iv. **Personal Performance Goals** are the Objectives set by the students about their performance in the class during teaching and in form of marks they want to score in examination.

v. **Personal Mastery Goals** are the Objectives set by the students to achieve mastery over skills and subject contents in a particular class.

vi. **Disruptive Behaviour** refers to the behaviour of students such as teasing, talking out of turn, getting out of one’s seat, disrespecting others, violence and vandalism, engagement in which annoys the teacher and interrupt the normal teaching process in the classroom.

vii. **Perception of School Emphasis on Performance** is a belief or an image the students have, that in the school the teacher put emphasis in the class on performance in the examination and in the classroom teaching.

viii. **Perception of School Emphasis Mastery** is a belief or an image the students have, that in the school the teacher put emphasis in the class on mastery of the skills and subject content.

ix. **Academic Achievement** is the percentage of marks scored in final examination of previous class.

**Research Design**

In the present study four dependent variables namely “general well-being ($Y_1$), school-related well-being ($Y_2$), achievement goals ($Y_3$) and academic achievement ($Y_4$)” were considered. Each of these dependent variables were supposed to be related to common variable namely Emotional Intelligence ($X$) constituted by self-awareness ($X_1$), self-management ($X_2$), social awareness ($X_3$) and social skills ($X_4$). In the sequel the variables $X_1,\ldots, X_4$ have been labeled as explanatory variables. The purpose of this study was to determine the relationship that existed between the emotional intelligence of students and their well-being, achievement goals and academic achievement. Further, it seeks to determine the influence of socio-demographic variables viz. gender, parents’ education, monthly income, area of residence (rural/urban), school attending (public/government) and caste on emotional intelligence, well-being, achievement goals.
and academic achievement. Another purpose of the study was to investigate the linear relationship among dependent variables and explanatory variables.

Therefore, keeping in view the nature of study the investigator adopted a descriptive survey method to carry out the study. Descriptive survey method deals with, what exists at present and it describes and interprets the current prevailing conditions, relationships and practices. It is a relationship study designed to analyze the relationship between variables (Gall, Borg, & Gall, 1996). An advantage to the correlational method is its usefulness in studying problems in education and in other social sciences. Correlational research permits the researcher to investigate relationships among a large number of variables. Another advantage of the correlational method is that it provides information about the degree to which certain variables are related.

**Objectives of the study**

The following were the objectives of the study:

1. To explore the relationship between the emotional intelligence and well-being.
2. To explore the relationship between the emotional intelligence and achievement goals.
3. To explore the relationship between the emotional intelligence and academic achievement of students at secondary level.
4. To see the dependency/linear relationship of variable \( Y_1 \) (general well-being,) on/with explanatory variables \( X_1 \) (self-awareness), \( X_2 \) (self-management), \( X_3 \) (social-awareness) and \( X_4 \) (social skills) and to establish prediction equation for dependent variable \( Y_1 \) (general well-being) if the linear dependency will be found.
5. To see the dependency/linear relationship of variable \( Y_2 \) (school-related well-being,) on/with explanatory variables \( X_1 \) (self-awareness), \( X_2 \) (self-management), \( X_3 \) (social-awareness) and \( X_4 \) (social skills) and to establish prediction equation for dependent variable \( Y_2 \) (School-related well-being) if the linear dependency will be found.
6. To see the dependency/linear relationship of variable \( Y_3 \) (achievement goals) on/with explanatory variables \( X_1 \) (self-awareness), \( X_2 \) (self-management), \( X_3 \) (social-awareness) and \( X_4 \) (social skills) and to establish prediction equation for dependent variable \( Y_3 \) (achievement goals) if the linear dependency will be found.
7. To see the dependency/linear relationship of variable $Y_4$ (academic achievement) on/explanatory variables $X_1$ (self-awareness), $X_2$ (self-management), $X_3$ (social-awareness) and $X_4$ (social skills) and to establish prediction equation for dependent variable $Y_4$ (academic achievement) if the linear dependency will be found.

8. To compare students having high emotional intelligence and students having low emotional intelligence with respect to general well-being.

9. To compare students having high emotional intelligence and students having low emotional intelligence with respect to school-related well-being.

10. To compare students having high emotional intelligence and students having low emotional intelligence with respect to achievement goals.

11. To compare students having high emotional intelligence and students having low emotional intelligence with respect to academic achievement.

**Secondary Objectives**

12. To compare male and female students with respect to emotional intelligence, well-being, achievement goals and academic achievement.

13. To compare students with different levels of parents' education (undergraduate and graduate) with respect to emotional intelligence, well-being, achievement goals and academic achievement.

14. To compare students with different levels of family monthly income (less than 15000 and more than 15000) with respect to emotional intelligence, well-being, achievement goals and academic achievement.

15. To compare rural and urban students with respect to emotional intelligence, well-being, achievement goals and academic achievement.

16. To compare public and ordinary school students with respect to emotional intelligence, well-being, achievement goals and academic achievement.

17. To compare general category and reserved category students with respect to emotional intelligence, well-being, achievement goals and academic achievement.

**Hypotheses of the study**

The following were the hypotheses of the study:
1. There is no significant relationship between the emotional intelligence and well-being.
2. There is no significant relationship between the emotional intelligence and achievement goals.
3. There is no significant relationship between the emotional intelligence and academic achievement.
4. $\beta_1, \ldots, \beta_5 = 0$, i.e., all the explanatory variables $X_1$ (self-awareness), $X_2$ (self-management), $X_3$ (social awareness) and $X_4$ (social skills) do not have any significant linear relationship with the dependent variable $Y_1$ (general well-being).
5. $\beta_1, \ldots, \beta_5 = 0$, i.e., all the explanatory variables $X_1$ (self-awareness), $X_2$ (self-management), $X_3$ (social awareness) and $X_4$ (social skills) do not have any significant linear relationship with the dependent variable $Y_2$ (school-related well-being).
6. $\beta_1, \ldots, \beta_5 = 0$, i.e., all the explanatory variables $X_1$ (self-awareness), $X_2$ (self-management), $X_3$ (social awareness) and $X_4$ (social skills) do not have any significant linear relationship with the dependent variable $Y_3$ (achievement goals).
7. $\beta_1, \ldots, \beta_5 = 0$, i.e., all the explanatory variables $X_1$ (self-awareness), $X_2$ (self-management), $X_3$ (social awareness) and $X_4$ (social skills) do not have any significant linear relationship with the dependent variable $Y_4$ (academic achievement).
8. There is no significant difference between the students having high Emotional intelligence and students having low emotional intelligence with respect to general well-being.
9. There is no significant difference between the students having high emotional intelligence and students having low emotional intelligence with respect to school-related well-being.
10. There is no significant difference between the students having high emotional intelligence and students having low emotional intelligence with respect to achievement goals.
11. There is no significant difference between the students having high emotional intelligence and students having low emotional intelligence with respect to academic achievement.

Secondary Hypotheses

12. There is no significant difference between male and female students with respect to emotional intelligence, well-being, achievement goals and academic achievement.

13. There is no significant difference between students with different levels of parents' education (undergraduate and graduate) with respect to emotional intelligence, well-being, achievement goals and academic achievement.

14. There is no significant difference between students with different levels of family monthly income (less than 15000 and more than 15000) with respect to emotional intelligence, well-being, achievement goals and academic achievement.

15. There is no significant difference between rural and urban students with respect to emotional intelligence, well-being, achievement goals and academic achievement.

16. There is no significant difference between public and ordinary school students with respect to emotional intelligence, well-being, achievement goals and academic achievement.

17. There is no significant difference between general category and reserved category students with respect to emotional intelligence, well-being, achievement goals and academic achievement.

Pilot study

The “Emotional Competence Inventory” by Boyatzis et al. (1999) and “Achievement Goals and Students Well-Being”, questionnaire by Kaplan & Maehr (1999) were administered on a sample of 50 students of 10th standard of the same population from which final sample was to be selected to find out the appropriateness of the questionnaire or any difficulty faced by the students while responding to the items of the questionnaire regarding comprehension of statement and adequacy of language of items. Simple instructions were given for filling up the questionnaire. The results of the pilot study ensured the adequacy of the questionnaire for the purpose of the study.
Sample

The sample of the study includes 400 students of age range 13-16 years of 10th standard from 10 secondary schools of Jhajjar and Rohtak districts. The schools were selected randomly and the subjects were taken as a cluster from each school the investigator visited. Among the participants 241 were males and 159 were females and these were residents of rural and urban areas. The sample students were from general and reserved categories and further, they were from a mixed socio-economic background. The investigator picked up 40 students from each school to make a total sample of 400 students.

In order to compare students having high EQ and student having low EQ with respect to (i) well-being (ii) school-related well-being (iii) achievement goals and (iv) academic achievement a sample of 27% high scoring and 27% low scoring students in the respective categories was obtained by applying Kelley’s (1939) criterion of top 27% and bottom 27%.

Delimitations of the study

Certain delimitations of the study must be considered. They are listed below:
1. The study has been delimited to a sample of 400 students studying in 10th standard.
2. The sample used was confined to Jhajjar and Rohtak districts of Haryana state.
3. The data collected was self-reported and, therefore, subject to the limitations of that process.
4. The study has been delimited to the use of following tools:
   i. "Emotional Competence Inventory" by Boyatzis et al. (1999)

Description of the tools

Emotional Competence Inventory is comprised of 4 scales and 45 items. The response scale for all the items in the survey was a 5-point Likert scale with anchors of 1-"never" to 5-"always". This inventory includes self-awareness, self-management, social awareness and social skills.
**Self-awareness** consists of Knowing one's internal states, preferences, resources and intuitions. This dimension contains the competencies of emotional self-awareness, accurate self-assessment, and self confidence.

**Self-management** involves the management of one's internal states, impulses, and resources to facilitate reaching goals.

**Social Awareness** refers to being aware of others' feelings, needs and concerns.

**Social Skills** are the basic skills in interpersonal relationships. It involves adeptness at inducting desirable responses in others.

This inventory consists of 45 statements with internal consistency $\alpha = .73$

**Achievement Goals and Students Well-Being** questionnaire is comprised of 10 scales and 71 items. The response scale for all the items in the survey was a 5-point Likert scale with anchors of 1-“never” to 5- “always”.

Psychological well-being was treated in this study as a phenomenological organization of students’ emotional, cognitive, and behavioural experiences. This construct is known to be composed of various dimensions and was, therefore, assessed with a variety of measures. The measures included students’ report on their general emotional tone as well as disruptive behaviour in the class, students’ perception of their social relationship with peers, and perceptions of academic efficacy.

**General Well-Being:** General emotional tone, perceptions of relationship with peers, and general behavioral control were assessed with scales adopted from the Self-Image Questionnaire for Young adolescents (SIQYA), developed by Petersen et al. (1984). The SIQYA was found to be highly correlated with the Rosenberg Self-Esteem Inventory (SEI) which is a well validated measure of self-esteem. Three scales are taken from the SIQYA; the scales are labeled Emotional Tone, Peer Relationship, and Impulse control with internal consistency as: (i) Emotional Tone: Boys $\alpha = .81$, girls $\alpha = .85$, (ii) Peer Relationship: boys $\alpha = .85$, girls $\alpha = .81$ and (iii) Impulse Control: boys $\alpha = .72$, girls $\alpha = .76$.

**School-Based Measures**

Six of the scales were adopted from the patterns of adaptive Learning Survey (PALS) by Midgley, Maehr, and Urdan (1993).
**School-Related Affect:** A 7 item scale measures affective experiences in school, with internal consistency as $\alpha = .82$.

**Perceived Academic Efficacy:** A 6 item scale measuring perceived academic efficacy to master the material taught in school with internal consistency as $\alpha = .84$.

**Personal and Perceived Emphasis of Achievement Goals:** The scales measuring personal and perceived achievement goals have internal consistency as: perceived mastery emphasis: $\alpha = .83$; Perceived performance emphasis: $\alpha = .75$; personal mastery goals: $\alpha = .80$; personal performance goals: $\alpha = .84$.

**Self-Reported Disruptive Behaviour** A 5 item scale measuring self report of disruptive behaviour has internal consistency $\alpha = .83$

**Procedure of data collection**

The 450 students of 10th standard from ten secondary schools of Jhajjar and Rohtak districts as subjects responded to a 116-items survey which was administered by the investigator himself in the students' classes. The teacher was not present in the room. Students were informed that participation in the study is voluntary and assured that their identities and answers would be kept confidential. The items were read aloud and time was given to respond. The students were encouraged to ask for clarification regarding unclear items. The time it took to fill the survey was approximately 1 hour.

The students who did not provide full information were dropped out from the final analysis. Thus, the investigator was left with 400 students due to subject mortality during the course of administration of the tools.

**Scoring of the tools**

The Emotional Intelligence inventory has four sub-scales and the Achievement Goals and Student Well-Being questionnaire has ten sub-scales. The subjects were supposed to respond on a five point scale i.e. Always, Sometime, Can't say, Rarely and Never. Every 'always' response was awarded 5 score, 'sometimes' was awarded 4 score, 'cannot say' was awarded 3 score, 'rarely' was awarded 2 score and 'never' response was awarded 1 score and opposite for the reverse statements. Total score on each sub-scale was calculated by adding the scores of all statements.
Statistical techniques used

The following statistical techniques were used for the analysis of data.

i. Cronbach’s Alpha model to test the reliability of the data.

ii. Descriptive Statistics

iii. Q-Q plots to check the normality.

iv. ‘t’-ratios were worked out to find out the significance of difference between means of various groups.

v. Spearman’s Rank correlation.

vi. Stepwise Multiple Linear Regression.

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/ordinary) 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.

Educational implications

This study examined relationship among emotional intelligence and well-being, achievement goals and academic outcomes for high school students. The results support 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. 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. Schools should help students learn the abilities underlying emotional intelligence. Possessing these abilities 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. The emotions, feelings and values are vital for a person’s well-being and achievement in life. 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.

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.