CHAPTER 5

MAJOR FINDINGS, IMPLICATIONS OF THE STUDY AND SUGGESTIONS FOR FURTHER RESEARCH

5.0 INTRODUCTION

The previous chapter dealt with the analysis and interpretation of the collected data. The present chapter presents the findings of the study based on the results given in Chapter 4, implications of the study and suggestions for further research. This chapter is divided into three sections, section 1, 2 and 3. The first section presents the findings of the study. The second section deals with the implications of the study. The third section gives suggestions for future research followed by conclusion.

SECTION I

5.1 FINDINGS OF THE STUDY

As mentioned above, section I presents the findings of the study. According to the objectives of the study mentioned in Chapter 3, there are 32 findings. In order to make it self-explanatory, findings are presented in tabular form. The objectives of the study, corresponding hypotheses and the findings are presented in Table 5.1.
Table 5.1

Findings of the study

<table>
<thead>
<tr>
<th>S.No</th>
<th>Objectives</th>
<th>Null Hypothesis</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>To find out the significant difference between socio-demographic and economic factors with emotional intelligence of adult learners.</td>
<td>There is no significant difference between socio-demographic and economic factors and emotional intelligence of adult learners.</td>
<td>There is significant difference between gender with respect to self emotional appraisal, emotional appraisal in others and self regulation of emotion.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>There is significant difference between education with respect to emotional appraisal in others and facilitation of emotional performance.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>There is significant difference between mother tongue with respect to self emotional appraisal, self regulation of emotion and overall emotional intelligence.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>There is significant difference between age group and emotional appraisal in others.</td>
</tr>
<tr>
<td>S.No</td>
<td>Objectives</td>
<td>Null Hypothesis</td>
<td>Findings</td>
</tr>
<tr>
<td>------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>There is significant difference between years of study with respect to all dimensions of EI of adult learners.</td>
<td>There is significant difference between years of study with respect to all dimensions of EI of adult learners.</td>
<td>There is significant difference between years of study with respect to all dimensions of EI of adult learners.</td>
</tr>
<tr>
<td></td>
<td>There is significant difference between family incomes with respect to all dimensions of EI of adult learners.</td>
<td>There is significant difference between family incomes with respect to all dimensions of EI of adult learners.</td>
<td>There is significant difference between family incomes with respect to all dimensions of EI of adult learners.</td>
</tr>
<tr>
<td></td>
<td>There is significant difference between primary medium of instruction in schooling with respect to self emotional appraisal and self regulation of emotion.</td>
<td>There is significant difference between primary medium of instruction in schooling with respect to self emotional appraisal and self regulation of emotion.</td>
<td>There is significant difference between primary medium of instruction in schooling with respect to self emotional appraisal and self regulation of emotion.</td>
</tr>
<tr>
<td></td>
<td>There is significant difference between branch of study with respect to self emotional appraisal, emotional appraisal in others and overall EI.</td>
<td>There is significant difference between branch of study with respect to self emotional appraisal, emotional appraisal in others and overall EI.</td>
<td>There is significant difference between branch of study with respect to self emotional appraisal, emotional appraisal in others and overall EI.</td>
</tr>
<tr>
<td>2.</td>
<td>To find out significant difference between academic performance with respect to the emotional intelligence of adult learners.</td>
<td>There is no significant difference between academic performances with respect to the emotional intelligence of adult learners.</td>
<td>There is significant difference between percentages of marks in all semesters with respect to all dimensions of EI except for self regulation of emotions.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S.No</td>
<td>Objectives</td>
<td>Null Hypothesis</td>
<td>Findings</td>
</tr>
<tr>
<td>------</td>
<td>----------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>3.</td>
<td>To find out the relationship between emotional intelligence and learning style of adult learners</td>
<td>There is no significant relationship between emotional intelligence and learning style of adult learners</td>
<td>There is significant relationship between types of learning style with respect to all dimensions of EI of adult learners.</td>
</tr>
<tr>
<td>4.</td>
<td>To find out the association between demographic and economic factors with learning style of adult learners</td>
<td>There is no association between demographic and economic factors and learning style of adult learners</td>
<td>There is association between types of LS and gender of adult learners.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>There is association between types of LS with respect to age group.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>There is association between types of LS with respect to education.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>There is association between types of LS with respect to years of study.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>There is association between types of LS with respect to primary medium of instruction in schooling.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>There is association between types of LS with respect to branch of study.</td>
</tr>
<tr>
<td>S.No</td>
<td>Objectives</td>
<td>Null Hypothesis</td>
<td>Findings</td>
</tr>
<tr>
<td>------</td>
<td>------------</td>
<td>----------------</td>
<td>----------</td>
</tr>
<tr>
<td>5.</td>
<td>To find out the association between learning style and academic performance of adult learners.</td>
<td>There is no association between types of LS and academic performance</td>
<td>H17: there is association between types of LS with respect to percentage of marks in previous semesters.</td>
</tr>
<tr>
<td>6.</td>
<td>To find out the association between socio demographic and economic factors with academic performance of adult learners</td>
<td>There is no association between socio demographic and economic factors and academic performance of adult learners</td>
<td>There is association between branch of study and percentage of marks in all semesters.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>There is association between the prerequisites demanded by the course before enrolment and percentage of marks in all semesters.</td>
</tr>
<tr>
<td>7.</td>
<td>To find out the association between emotional intelligence and academic performance of adult learners</td>
<td>There is no association between emotional intelligence with academic performance of adult learners</td>
<td>There is association between level of EI and percentage of marks in all semesters.</td>
</tr>
<tr>
<td>8.</td>
<td>To validate the conceptual model framework developed by the researcher through Structural Equation Modeling (SEM)</td>
<td></td>
<td>The conceptual model developed by the researcher is fit.</td>
</tr>
</tbody>
</table>
Table 5.1 shows that there are eight objectives, 7 null hypotheses and 20 findings. Each objective has a corresponding hypothesis and each finding is shown individually.

SECTION 2

In section 1 findings of the study were given. This section gives some important implications of the present study.

5.2 IMPLICATIONS OF THE PRESENT STUDY

The findings of this investigation indicate that several relationships exist between emotional intelligence, learning styles, academic performance and demographic variables. In higher educational settings, such as colleges and universities, understanding the relationships between learning environment components (such as students as learners, teachers as facilitators, tasks, physical space, cognitive and emotional intelligence of learners and different styles of learning ) is fundamental in helping educators to address student needs and promote understanding and learning (Ahmad, Piccoli & Ives, 1998; Maor, 1999). Miglietti and Strange (1998) note that specific teaching orientation towards personalized instruction, relating learning to students’ experiences, assessing student preferences for particular learning styles, encouraging student participation and maintaining flexibility, all seem to offer potential for contributing to students’ success. Hence the conclusions of this study have implications for students, teachers, college administrators, research workers in management and pedagogy and educational policy formulators and planners.

In the present study it was found that there is significant difference between, levels of education (under-graduate and post-graduate) with regard to the four dimensions of emotional intelligence (vide. 4.2.2.). The mean scores of PG students are more than the mean scores of UG students on ‘self-
emotional appraisal’ and ‘facilitation of emotional performance’ of emotional intelligence. It was also found that students of age category ‘24 and above’ and ‘years of study’ (senior levels in the college) have higher scores on ‘emotional appraisal in others’ of emotional intelligence (vide. 4.2.4). When these findings are put together, what one can infer is that age could be influencing the emotional intelligence of a person. Students at PG level are elder to students at UG level. As a person grows in age, it is quite natural that they become more matured. This finding highlights the need for training UG students, who are younger to PG students, in emotional competencies. This training should incorporate lessons in emotional, cognitive and behavior skills. Key ingredients of such a training program, as given by W.T. Grant consortium on the school based promotion of social competence are given below:

1. Emotional skills
   - Identifying and labeling feelings,
   - Expressing feelings,
   - Assessing the intensity of feelings,
   - Managing feelings,
   - Delaying gratification,
   - Controlling impulses,
   - Reducing stress
   - Knowing the differences between feelings and actions.

- Cognitive skills
  - Self-talk- conducting an “inner dialogue” as a way to cope with a topic or challenge or reinforce one’s own behavior
  - Reading and interpreting social cues- for example, recognizing social influences on behavior and seeing oneself in the perspective of the larger community
Using steps for problem-solving and decision making—for example, controlling impulses, setting goals, identifying alternative actions, anticipating consequences

Understanding the perspective of others

Understanding behavioral norms (what is and what is not acceptable behavior)

A positive attitude towards life

Self-awareness— for example, developing realistic expectations about oneself

**Behavioral skills**

- Nonverbal— communicating through eye contact, facial expressiveness, tone of voice, gestures and so on

- Verbal— making clear cut request, responding positively to criticism, resisting negative influences, listening to others, helping others, participating in the positive way in peer group activities

From the above discussion it is clear that the challenge for students is how to manage their emotional life with intelligence. Teachers and elders should keep in their mind that students’ passions when well-exercised have wisdom; passions with wisdom guide their thinking, their values and finally their survival on this earth. As Aristotle observed, the problem is not with emotionality, but with the appropriateness of emotion and its expression. Anyone can become angry, that is easy, but to be angry with the right person, to the right degree, at the right time for the right purpose and in the right way—this is not easy (The Nicomachean Ethics).
Another important finding in this study is that there is significant difference among ‘self emotional appraisal’, ‘emotional appraisal in others’, ‘self regulation of emotion’, ‘facilitation of emotional performance and primary medium of education (vide. 4.2.1.3.3). Since in many colleges in Chennai metropolitan city, student population is multi lingual, multicultural and multiethnic, the main communication medium and the link language is English. Students who opt for Tamil, Hindi or other regional languages as medium of instruction in their school should not feel lack of confidence while they interact with their teachers and classmates. They can be trained in English communication and soft skills. Such training programs should include lessons in accent free communication in English (influence of mother tongue), manners, etiquettes etc. Students coming from semi-urban and rural schools should be given special attention by their mentors and counselors. The researcher from her experience learnt that students coming from rural schools find the sudden shift to colleges in cities difficult to adjust to the new environment and do not come forward to take up leadership roles. It is noticed that lack of good communication skills in English keep them away from participating in various study related activities.

The study reported that male students significantly use pragmatist learning styles strategies than their female counterparts. Based on the mean score, male students have higher scores on “pragmatist” (31.1) and “reflector” (30.9) (vide.4.2.11), whereas female students have higher scores on “reflector” (29.4) and “activist” (27.1). In order to address the more complex curriculum which characterizes today’s pedagogical system in India which includes continuous assessment and evaluation based on case study, mini projects, presentations and role plays, they should be encouraged to have different learning styles for better academic achievement, rather than confining to any one particular style.
What is inferred from the ongoing discussion is that some instructors lecture, while others demonstrate or lead students to self-discovery. Some instructors focus on principles and others on applications and some emphasize memory and others understanding. All the students activities which are mentioned above, lead them to self discovery and stress upon understanding and application of theoretical concepts which they learn in the class. According to Sternberg (1997), students need to adapt to instruction that is not compatible with their profile of abilities, but they can shape their learning environments to maximum capitalize on the strengths in their ability profiles. Moreover, all students potentially learn better when they are able to encode the subject matter taught to them in a variety of ways.

Keefe (1979, 1987) addressed the importance of knowing the emotional and intellectual differences that exist among students and emphasized that not everyone learns in the same way. Kolb (1984) suggested a variety of instructional approaches to address these individual differences in learning. He suggested a learning environment that matches students’ preferred learning style in order to provide opportunities for growth and development. Instructors should make sure that their curriculum provides for flexible teaching style that can reach each individual student’s learning style. But meeting individual learners’ learning style in an educational setting requires meticulous planning and efforts on the part of the teacher (Pallapu, 2007). Identifying students’ learning styles influence the types of learning experiences that students find effective, comfortable and growth promoting (Ross, Drysdale & Schulz, 2001). But, it is also important to remember that addressing a student’s learning style is only a part of the puzzle in terms of the factors that influence learning and that there are many other pieces to the puzzle that support learning. In conclusion, there are many different learning styles in the classroom; therefore a variety of teaching styles are also needed
to meet the needs of all or most of the students in the class (Jaeger, 2001), which is a great challenge for teachers.

At the same time, learning style of a student is influenced by his/her emotional intelligence. According to Bar-On (1997), emotional intelligence is an array of personal, emotional and social competencies and skills that influence one's ability to succeed in coping with environmental demands and pressures and directly affect one's overall psychological well-being. In other words, one’s knowledge, skills and overall intelligence must be augmented by the ability to understand, perceive and regulate emotions. Mayer and Caruso (1999) believe that emotional intelligence is not set at birth but can be developed through education and training. Since learning is influenced by the student’s learning style and the learning style is influenced by one’s emotional competencies, emotional intelligence should be given equal importance along with academic intelligence. As Goleman (1996) observes “at best IQ contributes about 20% to the factors that determine success in life, which leaves 80% to other forces”. In fact, many people’s ultimate niche in society is determined by non-IQ factors. The ‘other forces’ or those non-IQ factors include abilities such as being able to motivate oneself and persist in the face of frustrations; to control impulse and delay gratification; to regulate one’s moods and keep distress from swamping the ability to think, to empathize and to hope (Goleman, 1996).

Another interesting finding the study brought into the limelight is that there is significant association between education and type of learning style. Based on row and column percentage, there are more activist and theorist in undergraduate students and more pragmatists and reflector under post graduate students. Undergraduate students can be encouraged initially about using other learning styles in order to develop themselves in a creative
and innovative manner which makes them feel relaxed as well as interested towards their education.

At the same time, there is also a very interesting finding of the study which highlights that there is significant association between level of emotional intelligence and type of learning style. Based on row and column percentage, there are more activist (67.6) under low level of emotional intelligence; there are more reflector (34.8) and theorist (34.5) under average level of emotional intelligence and more pragmatist (71.0) under high level of emotional intelligence.

Thus, based on this study, one can see how emotions play an important role in learning. Emotions influence a host of cognitive processes, such as attention, perception, memory, decision making and social judgments (Planalp & Fitness, 1999). Elder (1997) notes that emotions play a significant role in students’ ability to learn content, thus emotions can facilitate learning. How a student uses emotions may also affect his/her ability to learn. For example, if a student has just lost a loved one, then it would probably be hard for him/her to focus on learning due to the emotion of sorrow. Emotions provide people with valuable information about themselves and how they relate to others. Emotions are meaningful to education; they drive attention which drives learning and memory (Sylwester, 1994). Boud, Keogh and Walker (1985) state that negative feelings can form negative attitudes towards learning. Emotions can distort perceptions, lead to false interpretations of events and can undermine the will to persist. Positive feelings and emotions can greatly enhance the learning process; they can keep the learner on the task and can provide a stimulus for new learning.

But it should be remembered that emotional intelligence is much more complex and integrative than acknowledging affective components within a learning environment (Jaeger, 2001). Emotions trigger cognitive
activities and direct actions (Salovey & Mayer, 1990). Researchers (Mentkowski & Strait, 1983; Barris et al., 1985; Geiger & Pinto, 1991; Pinto et al., 1994) noted that an individual’s experiences and environmental factors may lead to changes in learning style preferences. These experiences and environmental factors may be directly or indirectly related to an individual’s emotions and feelings, thereby creating a critical role for emotions in learning (Jaeger, 2001).

At the same time, students must feel that they are getting quality education while attending a college or university. The curriculum must reflect the belief that student’s success is driven not only by traditional academic achievement but also by the school’s/college’s ability to help students experience success, belonging, respect, power, structure, recognition, consistency positivity and varied learning (Allen & Cohen, 2006). Teachers should help their students under their care to ascend the Maslow’s hierarchy of needs and finally reach the stage of self-actualization.

Thus, the instruction in schools/colleges must reflect traditional academic skills and activities and experiences that develop students’ emotional and social skills. Surveys of parents and teachers and other anecdotal evidences shows the world wide trend of present generation of youngsters to be more troubled emotionally than the previous generations of youngsters, they are more lonely and depressed, more angry and unruly, more nervous and prone to worry, more impulsive and aggressive. The solution lies in how we prepare our youngsters for life. Emotional education of children should not be left to chance which may bring disastrous results. Along with quality instruction come expectations for student’s achievement. When teachers hold high expectations for students’ reflective capabilities, cooperative/collaborative skills and their decision making abilities, students grow emotionally leading to academic achievement. Emotionally students feel
the need to uphold high expectations and are emotionally positive, thus creating higher achievement in his/her academic goals (Allen & Cohen, 2006).

Emotional knowledge, skills and competencies are essential to student’s development of values of individuation and community (Low et al., 2004). Individuation involves respecting the fact that students entering into higher education settings are searching for his/her own unique identity. A community at a university or college is the place where students grow through their involvement in meaningful relationships. Students benefit from relationships that make them feel valued, contribute to positive self-worth, create a healthy, productive learning community and form a personal sense of belonging (Low et al., 2004). Healthy relationships are important to academic and emotional growth and development of students. The new vision should be to educate the whole student, bringing together the mind and heart in the classroom.

Instructors can assist students in perceiving, understanding, using and managing their emotions. They can assist students to perceive their emotions by making students become more aware of the different external factors that can affect their learning. Wise teachers help students to use their emotions in the classroom to promote a positive learning environment. Most importantly, they can help students in understanding their emotions by helping them label their emotions and making them realize that they have to take responsibility for their emotions. Finally, instructors can help them to manage their emotions by empowering them through words of encouragement (Gross, 2007).

In addition to imparting knowledge to students, teachers should promote self-awareness, self-motivation, empathy and social skills in students in order to make them more aware of their emotional intelligence. Yes, the
schools and colleges have to move out of its buildings and rigidities of traditional curriculum to find and serve the learning needs of the present generation of youngsters. Instructors can use their own emotional intelligence along with their students’ emotional intelligence to set the stage for learning in the classroom. If students tap into their emotions and understand how they play a role in learning, that information can be used to create a positive learning environment. Instructors should also promote self-motivation within students so that even when a student is faced with setbacks and discouragement, they can still keep themselves going through self-motivation. Instructors should consider the emotional side of their subject, topic or unit. When presenting instructions to the class, the instructor should be able to read students’ feelings. By promoting social skills, students are able to handle emotions in relationships. When students understand how such social skills as coping with sadness or handling anger can be geared towards making sure that he/she is in good spirits, it can promote effective learning environment. In conclusion, when a student and an instructor perceive, use, understand and manage emotions he/she can promote and enhance classroom learning (Gross, 2007). Based on the findings of this study, instructors should review their teaching styles to reach the variety of learning styles in the classroom, while understanding the effect emotional intelligence may have on students’ learning. Most of all, it calls for a change of attitude for teachers to see themselves not as the aloof guardians of an austere academic tradition, but as persons whose mission is to place knowledge at the service of students, to empower them to work for their own individual and collective betterment.

Finally, education should conform to the ‘Heaven of Freedom’ which Tagore visualized and which is still to be realized in India. This is possible only through the best quality of education, education of the body, mind and soul, beyond three r’s (reading, writing and arithmetic) imparted by the best quality of instructors in the best possible learning environment. Thus,
the dynamic function of colleges, the function of reviewing, un-weaving, reweaving and revitalizing the social fabric, the function of constantly reorganizing and reconstructing human experiences will be made possible through the colleges in Chennai.

SECTION 3

This section gives some important suggestions for future research which are discussed below.

5.3 SUGGESTIONS FOR FURTHER RESEARCH

The present research on the effect of emotional intelligence on learning styles of adult learners reveals that the evidence in this regard is not conclusive and also that the probing is not comprehensive. It is not possible to list out conclusively the factors that make for emotional intelligence in college going students. Similarly, it is not possible to establish “one- to -one” correspondence between levels of emotional intelligence and styles of learning.

As stated in the limitations of the study, the present study is only a fragmentary attempt in the field of emotional intelligence and learning styles. The conclusions apply only to the adult learners of Chennai city from which the sample is drawn. Any broader generalization beyond this population will not be justified. This calls for future research in this area. Suggestions for further research are given below:

1. It is not possible to measure exactly the relationship between demographic factors, emotional intelligence and learning styles in adult learners with a sample size of 700. Hence there is need for further studies taking larger sample.
2. The instruments, Wang and Lee emotional intelligence test and Honey and Mumford learning styles questionnaire should be tested outside Chennai to examine their validity and reliability with other populations.

3. This study may be replicated using college and university students throughout Chennai, beyond Chennai and beyond Tamil Nadu with varying enrolments in other cultures.

4. This study may be replicated using different measuring instruments that measure emotional intelligence and learning styles.

5. Researches may be carried out to identify appropriate teaching methods for different learning styles.

6. More probing is needed to identify the appropriate teaching methodology for students with different levels of emotional intelligence.

5.4 CONCLUSION

The relationship between the four branches of emotional intelligence as measured by the Wang and Lee emotional intelligence test and learning styles performance as measured by the four mediation abilities of the Honey and Mumford learning style questionnaire accomplished the purpose for which each was designed. These instruments were designed using different conceptual structures. Therefore, the instruments can and should be used to examine independent constructs. In other words, the Wang and Lee emotional intelligence test and the Honey and Mumford learning style questionnaire are not interchangeable instruments measuring constructs from the same domain.
At the end of this study, the researcher nurtures the vision of innovative classroom instructions which provide the learners with basic training in emotional intelligence. The present curriculum in higher education should be revamped to incorporate lessons in essential human competencies such as self-awareness, self-control and empathy, transactional analysis, art of listening, resolving conflicts, cooperation and collaboration. From a scenario of competition, conflict and confrontation, which prevails in most of the schools and colleges in the country, students should be exposed to a scenario of co-operation, collaboration and co-evolution which may mould them into better employees, better spouses, better parents and better citizens of the country.

But many of the questions still remain unanswered: How can we bring intelligence to our emotions? How can we bring civic values to our college campuses? How can we transform moral deficiency into will and character? Hence the journey continues.................