

# **CHAPTER- 6**

## **SUMMARY AND CONCLUSIONS**

The Montessori method of education is becoming more popular in Indian cities in the recent decades. The parents, educationists and policy makers are keenly interested in the overall development of their children. Since its inception, the Montessori method of education is adopting several procedures based on its basic principles of cognitive, social and emotional development of the children. Although every principle of Montessori education is not followed in the Indian Montessori schools, the schools are adhering to several of them. The Montessori method of education focus on holistic development by providing hand on experiences (Lillard, 2005). The Montessori education method follow the rule of righteousness and equal opportunity which would support the development of independent attitudes, respect for self and others, and values among the students (Angell, 1998).

Montessori education is providing symmetry between liberty and regulation, promising safety and nurturing individuality, providing adequate challenge as well as chances for success (Humphryes, 1998). Working and learning are coordinated to the social development of the child. Collective emphasis is given on intellectual, social, emotional and spiritual development (Pickering, 2004). The Montessori school children are more creative and have significant higher cognitive/academic and social/behavioral skills than traditional school children (Besancon, & Lubart, 2007; Lillard, & Else-Quest, 2006). But no studies have been carried out in India to find the effect of Montessori method on personality factors like self-concept, emotional intelligence and frustration. The present study attempts to study the effect of Montessori method of education on personality factors like Self-concept, Emotional intelligence and Frustration compared to traditional method of education. Hence the present study was designed with the following objectives.

## 6.1 Research Objectives

1. To study self-concept, emotional intelligence and frustration of high school children with Montessori and traditional method of education background.
2. To explore the effect of socio-demographic variables like gender, age, domicile, income, religion on self-concept, emotional intelligence and frustration of high school children with Montessori and traditional method of education background.
3. To study the correlation between self-concept, emotional intelligence and frustration of high school children with Montessori and traditional method of education background.

## 6.2 Research Hypotheses

- Ha<sub>1</sub>:** Children of Montessori method of education background have significantly higher level of self-concept and emotional intelligence, and lower level of frustration than children of traditional method of education background
- Ha<sub>2</sub>:** There is significant difference between male and female Montessori school children in their level of self-concept, emotional intelligence and frustration
- Ha<sub>3</sub>:** There is significant difference between male and female traditional school children in their level of self-concept, emotional intelligence and frustration
- Ha<sub>4</sub>:** There is significant difference between rural and urban Montessori school children in their level of self-concept, emotional intelligence and frustration
- Ha<sub>5</sub>:** There is significant difference between rural and urban traditional school children in their level of self-concept, emotional intelligence and frustration
- Ha<sub>6</sub>:** There is significant difference between Montessori school children from high and middle income family in their level of self-concept, emotional intelligence and frustration

**Ha<sub>7</sub>:** There is significant difference between traditional school children from low and middle income family in their level of self-concept, emotional intelligence and frustration

**Ha<sub>8</sub>:** Montessori school children from different age groups differ significantly between themselves in their self-concept, emotional intelligence and frustration

**Ha<sub>9</sub>:** Traditional school children from different age groups differ significantly between themselves in their self-concept, emotional intelligence and frustration

**Ha<sub>10</sub>:** Montessori school children from different religious groups differ significantly between themselves in their self-concept, emotional intelligence and frustration

**Ha<sub>11</sub>:** Traditional school children from different religious groups differ significantly between themselves in their self-concept, emotional intelligence and frustration

**Ha<sub>12</sub>:** There is a significant correlation between self-concept, emotional intelligence and frustration of children with Montessori and traditional method of education

### **6.3 Research Sample**

The present research included of total 1082 school children of Montessori and traditional education. Of them, 549 children were from Montessori education and 533 children were from traditional education background. The total number of male and female children in the Montessori education group was 287 and 262 respectively, whereas in the traditional education group it was 275 and 258 respectively.

#### **6.4 Psychological Measures Used in the Study**

- Demographic Data Sheet
- Self-concept Questionnaire by Saraswat (1984)
- Ba-ron Emotional Quotient Inventory: Youth Version (EQ-i: YV) (2000)
- Frustration Test by Chauhan and Tiwari (1972)

The investigator collected the responses for each of the scales personally from the students at their respective high schools. The collected data, which were complete in every respect, were scored as per the instructions given in the test manuals. The raw scores were transformed into 'T' scores.

#### **6.5 Statistical Test Applied**

- Independent Sample 't' Test
- Univariate 'F' Test (ANOVA)
- Post Hoc Comparison (Scheffe's Test)
- Pearson's Correlation Coefficient Test

### **6. 6 Major Findings**

#### **6.6.1. Comparison of self concept, emotional intelligence and frustration between the Montessori and the traditional high school children**

- The result obtained on comparison of Montessori school children with traditional school children on self-concept reveals that the children studied in Montessori school have higher self-concept compared to the traditional school children. This finding reveals that the Montessori school experience has a positive impact on the self-concept of children.
- The result reveals that the children placed in the Montessori schools are emotionally more intelligent than the children from traditional schools.

- It is reported that the children placed in Montessori schools are less frustrated than the children from traditional schools.

#### **6.6.2. Comparison of the Montessori high school children on their level of self-concept in relation to demographic variables**

- The result obtained on comparison of the Montessori school male and female children on self-concept reports that the female Montessori school children have higher global self-concept compared to the male Montessori school children. In dimensions like physical, education and moral self-concept the female Montessori school children have higher self-concept. On the remaining dimensions of self-concept (social, temperament and intellectual) there is no significant difference between the two groups.
- No significant difference is found between the Montessori rural and the urban children in their level of self concept. Only in physical and temperament dimension the urban Montessori children are found to be higher than the rural Montessori school children.
- Comparison test is done between the Montessori school children from middle and high family income background reveals that there is no significant difference in total self concept between these two groups. But in dimensions like physical, education and moral, the children from high family income are higher than the Montessori children from middle income family. In intellectual dimension of self-concept the Montessori school children from middle income family are higher than the Montessori school children from high income family.

- Comparison results of the Montessori school children from different age groups on their level of self-concept shows that there is no significant difference in the level of self-concept among the children from the age groups of 14, 15 and 16 years.
- The results obtained on comparison of the Montessori school children from different religious groups on self-concept reveal that there is significant difference between the self-concept of the Montessori school children from different religious groups. The study reports that the Christian children have higher self-concept than the Hindu children. And no significant difference is found between the Hindu and the Muslim, the Christian and the Muslim, the Muslim and the Hindu, the Hindu and other religious children, the Christian and other religious children, and the Muslim and other religious children in their level of self-concept.

### **6.6.3. Comparison of the Montessori high school children on emotional intelligence in relation to demographic variables**

- The result obtained on comparison of the Montessori school male and female children on self-regard, empathy dimensions and on total emotional intelligence found that the Montessori school female children have higher emotional intelligence than the Montessori school male children and in rest of the eight dimensions (interpersonal relation, impulse control, problem solving, emotional awareness, flexibility, reality testing, stress tolerance and assertiveness) of emotional intelligence there is no significant difference between the two groups.
- No significant difference is found between the Montessori rural and urban school children in their level of emotional intelligence. Only in problem

solving and empathy dimensions the urban Montessori school children have higher emotional intelligence than the rural Montessori school children.

- Comparison test was done between the Montessori children from middle and high family income background on their level of emotional intelligence. It was found that the Montessori school children from high family income background have high emotional intelligence than the Montessori school children from the middle family income background. Whereas in dimensions like self regard, interpersonal relation, impulse control, emotional awareness, flexibility, reality testing, stress tolerance, assertiveness and empathy also the Montessori school children from high income family are higher than the Montessori children from middle income family.
- Comparison between the Montessori children from different age groups on their level of emotional intelligence reveals that there is no significant difference in the level of emotional intelligence among the children from the age groups of 14, 15 and 16 years.
- The result obtained on comparison of the Montessori school children from different religious groups on emotional intelligence reveals that there is significant difference between the Montessori school children from different religious groups on emotional intelligence. The Hindu children are emotionally intelligent than the children from other religious groups, the Christian children are emotionally intelligent than the children from other religious groups and the Muslim children are emotional intelligent than the children from other religious groups.

#### **6.6.4 Comparison of the Montessori high school children on frustration in relation to demographic variables**

- The result obtained on comparison of the Montessori school male and female children on frustration reports that the male and the female children do not differ significantly in their total and dimensions of frustration.
- No significant difference is found between the Montessori rural and urban school children in their level of frustration. Only in aggression dimension of frustration the rural Montessori school children are found to be significantly higher than the urban Montessori school children.
- Comparison results between the Montessori school children from middle and high family income background in their level of frustration show that the Montessori school children from the middle family income background are more frustrated than the Montessori children from the high family income background. Whereas in all the dimensions of frustration the Montessori school children from middle income family are found to be higher than the Montessori children from high income family.
- Comparison was done between the Montessori school children from different age groups on their level of frustration and found that there is no significant difference in the level of frustration among the Montessori school children from the age groups of 14, 15 and 16 years.
- The result obtained on comparison of the Montessori school children from different religious groups on frustration reports that there is no significant difference between the Montessori school children from different religious groups.

#### **6.6.5. Comparison of traditional high school children on their level of self-concept in relation to demographic variable**

- The result obtained on comparison of the traditional school male and female children reveals that there is no significant difference between these two groups on their global and some dimensions self-concept. Only in intellectual dimensions of self-concept the male traditional school children are found to be higher than the female traditional school children.
- No significant difference is found between the traditional school children from the rural and the urban area in their level of self concept.
- Comparison test was done between the traditional school children from low and middle family income background and the result reveals that the traditional school children from the low family income background have higher self-concept compared to the traditional children from the middle income family. In all dimensions of self-concept also the traditional school children from low income family are found to be higher than the traditional school children from middle income family.
- Comparison results between the traditional school children from different age groups on their level of self concept indicate that the 14 years traditional school children have higher self concept compared to the 16 years traditional school children. And no significant difference is found between the 14 and the 15 years traditional school children, and the 15 and the 16 years traditional school children.
- The result obtained on comparison of the traditional children from different religious groups on self-concept reveals that there is no significant difference

between the self-concept of traditional school children from different religious groups.

#### **6.6.6. Comparison of the traditional high school children on emotional intelligence in relation to demographic variables**

- The result obtained on comparison of the traditional high school male and female children reports that there is no significant difference between the two groups in their total and dimensions of emotional intelligence. Only in empathy dimension of emotional intelligence the female traditional school children are higher than the male traditional school children.
- No significant difference is found between the rural and the urban traditional school children in their total and dimensions of emotional intelligence.
- Comparison results between the traditional school children from low and middle family income background in their level of emotional intelligence, report that there is no significant difference in total emotional intelligence between these two groups. Whereas only in stress tolerance dimension of emotional intelligence the traditional school children from low family income are found to be higher than their counter group.
- Further it was found that the 14 years children have higher emotional intelligence than the 16 years children. However, the 14 and 15 years children, the 15 and 16 years children do not differ significantly in their level of emotional intelligence.
- The result obtained on comparison of traditional school children from different religious groups on emotional intelligence reports that the Hindu children have higher emotional intelligence than the Muslim children. And no significant difference is found between the Hindu and the Christian, the Christian and the

Muslim, the Hindu and other religion children, the Christian and other religion children, and the Muslim and other religion children.

#### **6.6.7. Comparison of the traditional high school children on frustration in relation to demographic variables**

- It was found that the traditional school male and female children do not differ significantly in their level of frustration. Only in regression dimension of frustration the female traditional school children are higher than the male traditional school children.
- The result shows that the rural traditional school children are highly frustrated than the urban traditional school children.
- Comparison between the traditional school children from low and middle family income background in their level of frustration found that the traditional school children from low family income background are more frustrated than the traditional school children from middle income background. Whereas in regression, resignation and aggression dimensions of frustration also the traditional school children from the low income family are higher than the traditional school children from the middle income family.
- Comparison done between the traditional school children from different age groups on their level of frustration shows that there is no significant difference in the level of frustration among the children from the age group of 14, 15 and 16 years.
- The result obtained on comparison of the traditional school children from different religious groups on frustration reports that there is no significant difference between the traditional school children from different religious groups.

#### **6.6.8. Correlation between self-concept, emotional intelligence and frustration variable among the Montessori high school children**

The coefficient of correlation between self-concept and emotional intelligence is positively significant for the Montessori school children. A negative correlation is found between self concept and frustration. Similar results are found for emotional intelligence and frustration variables also. This implies that the Montessori school children have higher self concept, higher emotional intelligence and lower frustration.

#### **6.6.9. Correlation between self-concept, emotional intelligence and frustration variable among traditional high school children**

A positive correlation is found between self-concept and emotional intelligence among the traditional school children. A negative correlation is found between self-concept and frustration. Similarly negative correlation is found between emotional intelligence and frustration variables also. This reveals that the traditional school children have lower self concept, lower emotional intelligence and higher frustration.

### **6.7 Educational and Social implications**

The present research needs to be viewed in the framework of a larger body of investigation in the area of education. It establishes the self-concept, emotional intelligence and frustration are strong correlates of personality development of the children. Moreover this study has presented significant effect of Montessori method of education on children's self-concept, emotional intelligence and frustration. The researcher proposes the following educational implications in the light of the findings of the present study:

- By this scientific research it is proved that Montessori method of education significantly increases self-concept, emotional intelligence and frustration tolerance among children. By considering this study and previous literature the

benefit of Montessori method of education can be highlighted and recommended to introduce Montessori principles in traditional schools for the betterment of the children.

- Scientific research now supports that the personality is almost developed during childhood. The quality of the social advancement that takes place during this crucial period has strong implications on how children will work later in groups such as families, the workplace and as community members. The Montessori method of education gives special importance for child's personality development during their early development period.
- The result of the present study point out that there is significant improvement in self-concept, emotional intelligence and frustration tolerance among the Montessori school children. These entire three psychological variables are very important for socio-emotional development of children.
- The self-concept, emotional intelligence and frustration tolerance are the prime variables for personality development. It directly affects the child's growth and development pattern and shapes his/her future personal, social and academic life. Therefore to raise the self- concept, emotional intelligence and frustration tolerance, situation should be provided with the opportunities to have all types of exposures and to develop ability to face challenges in life.
- The roles of teachers are very crucial in enhancing self-concept, emotional intelligence and frustration tolerance among children. The traditional school teachers have immense responsibility to help children to develop positive self-image. The traditional school teachers are required to offer children varied opportunities to capitalize their strengths.

- The growth of positive self-concept, emotional intelligence and frustration tolerance seems to be facilitated when teachers' principles for evaluating child's success are based on individual norms rather than on social comparison. In Montessori method of education each child is treated individually and no comparison takes place. This has to be implemented in the traditional school too.
- Apart from teacher-child relationship, child-to-child relationship is also very important for socio-emotional development of children. It will improve mutual co-operation, acceptance and valuing of diversities among students which leads towards improved adjustment in school and in diverse life situations as well. The child-to-child relationship is given importance in the traditional education.
- Montessori method of education is based on child centered learning. The child enjoys classroom curriculum specially designed according to the need and abilities of the child. The children are facilitated to learn individually in their own pace and terms. This create natural situation for children to understand themselves better. This supports holistic development of children. This principle should be adopted in the traditional education also.
- Research on Montessori method of education has proved that the children not require rigorous 50 minutes class and standard text books, rather they require individualized learning patterns in their school which is designed radically different and effectively for the optimal cognitive, social and emotional development of children. This change has to take place in the traditional method of education.
- Human growth is the result of an unconscious creative action of the person, and this procedure is feasible only in the association with others, in a social situation. The Montessori method of education believes academic successes depends greatly

by giving children the liberty to allow their personality to open up naturally. If the child is socially supported then they will develop reliance, gratitude, esteem and self-confidence that will help them to excel both academically and socially. This has to be the important change in traditional method of education.

### **6.8. Suggestions for Future Research**

In the present investigation an attempt has been made to find out the impact of the Montessori method of education on self-concept, emotional intelligence and frustration of high school children. The suggestions for further research are as follows:

- Only three predictor variables i.e. self-concept, emotional intelligence, and frustration have been employed in the present investigation while some other personality factors' predictive value may also be explored.
- In the present study the effect of Montessori method of education on high school children is studied, whereas in future research the long time influence of the Montessori method of education can be studied by taking college students sample group who have studied in Montessori methods of education.
- Longitudinal studies can be recommended to know the influence of the Montessori education on later stages of life in family, workplace and society.
- The sample of the present investigation is confined to secondary schools of Karnataka State only. Samples from other States of the Country may also be studied in upcoming research.
- More advanced and sophisticated statistical techniques may be employed in further research to find out some other facts.