



Emotional Intelligence among Children of Montessori and Traditional Method of Education

KEYWORDS

Emotional Intelligence, Montessori Education, Traditional Education

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ABSTRACT *Montessori Method is a holistic approach of education evolved with the objective of initiating overall development with its greater benefits for the socio-emotional development of children apart from intellectual development. The method has unique features which benefits the children to develop holistically. Hence, the present study aimed to assess the emotional intelligence of children of Montessori and traditional method of education. It was hypothesized that children of Montessori Method of education have higher emotional intelligence than children of traditional method. In order to verify the above hypothesis a sample of 139 children were selected from schools which offer education with Montessori (N=73) and traditional methods (N=66). To measure emotional intelligence the Ba-ron Emotional Quotient Inventory: Youth Version (EQ-i: YV, 2000) was administered individually to the subjects. The data were subjected to 't' analysis and the major findings of the study revealed that the children of Montessori Method of education has significantly higher emotional intelligence than children of traditional method.*

Introduction:

Montessori education is an education approach developed by Italian physician and educator Maria Montessori. It is a 100-year-old method of schooling that was used with impoverished preschool children in Rome. The program continues to grow in popularity. Estimates indicate that more than 5000 schools in the United States – including 300 public schools and some high schools – use the Montessori program. Montessori education is practiced in an estimated 20,000 schools worldwide, serving children from infancy to eighteen years old (Montessori, 1964).

The Montessori education is characterized by multi-age classrooms, a social set of educational materials, student-chosen work in long time blocks, collaboration, the absence of grades and test, and individual and small group instruction both academic and social skills (Montessori, 1964). In the Montessori system of education, each child is treated as a unique being. He is encouraged to develop social and emotional skills in addition to intellectual ones. It ensures the development of self-esteem.

In a Montessori environment, children learn by exploring and manipulating specially designed materials. Each material teaches one concept of skill at a time, and lays a foundation from which students can comprehend increasingly abstract ideas. Children work with materials at their own pace, repeating an exercise until it is mastered. The teacher may gently guide the process, but her goal is to inspire rather than instruct. Montessori teaching engages all the senses, important for students with distinct learning styles. Students learn by doing and are free to move about.

The method has fundamentally different structure from traditional education. At least when strictly implemented, Montessori education fosters social, emotional and academic skills that are equal or superior to those fostered by other types of schools. This apart, beginning at an early age, Montessori students develop order, coordination, concentration, and independence. Self-correction and self-assessment are an integral part of the Montessori classroom approach. As they mature, students learn to look critically at their work, and become adept at recognizing, correcting and learning from their errors.

Benefits of Montessori Education:

Montessori education offers children opportunities to develop their potential as they step out into the world as engaged, competent, responsible, and respectful citizens with an understanding and appreciation that learning is for life.

Psychologists found that across a range of abilities, children at Montessori schools out-performed those given a traditional education. Some of the biggest differences were seen in social skills and behaviour. Montessori children displayed a greater sense of 'justice and fairness' interacted in an 'emotionally positive' way.

Montessori students become confident, enthusiastic, self-directed learners. They are able to think critically, work collaboratively and act boldly. It prepares the child for the world of adolescence, when thought and emotion evolve into understanding more abstract, universal concepts such as equity, freedom and justice. It is an approach that values the human spirit and the development of the whole child – physical, social, emotional and cognitive.

Emotional Intelligence:

Emotional intelligence refers to one's ability to express or release one's inner feelings/emotions. It implies an ease around others and determines one's ability to effectively and successfully lead and express. It is described as the essential social skills to recognize, interpret, and respond constructively to emotions in us and in others. Self-awareness, self-regulation, self-motivation, social awareness and social skills are the major element of emotional intelligence. Emotionally intelligent people do express appropriate emotions, reactions and communications of feelings by others.

Emotional intelligence can lead to improved health through avoiding stress that would otherwise result from suppressing emotions. It can also lead to improved relationships since inappropriate emotions are less likely to be expressed and appropriate behavior is not avoided through fear of triggering some emotion.

Overview of Literature:

The Montessori model focuses on educating the whole

child through hands-on, client-centred learning experiences. The effectiveness of some of the elements of Montessori education has been supported by research on human learning (Lillard, 2005). There are obvious theoretical differences among these approaches to preschool children, and many researchers have devoted their efforts to examining which method is most effective for children. One study focused on preschool attendance and the development of literacy skills and phonological awareness (Vance, 2008). The findings suggest that the Montessori approach to language instruction is superior to other forms at the preschool level. A study shows the Montessori Method to be superior in mathematics instruction (Reed, 2000).

Academic performance is one area in which Montessori has been shown to outshine traditional forms of teaching. Another area of study that yields similar findings is the examination of children's social development and self-esteem. For Montessori children, perceived ability to work together in groups was found to be positively associated with heightened levels of self-efficacy for academic achievement. Although traditional children were also found to gain self-efficacy for regulated learning through working together, as they enter higher grade levels, that self-efficacy decreases (Castellanos, 2002). Studies also suggest that a Montessori education instils a more positive sense of self-image (Glenn, 2003), high levels of efficacy (Castellanos, 2002; Rathunde & Csikszentmihalyi, 2005), and high levels of intrinsic motivation (Rathunde, 2003). The findings reviewed here show that Montessori is a strong educational alternative to the traditional model.

Research Methodology:

Hypothesis:

Children of Montessori Method of education have significantly higher level of Emotional Intelligence than children of traditional method.

Study Area:

The study area of present research includes co-education Montessori and traditional schools located in Dharwad and Belgaum cities of Karnataka State.

Sample:

The total sample size of the study is 139 school children studying in Montessori (N=73) and traditional (N=66) method of education.

1. Children of Montessori Education:

In this study the Montessori children comprise of the children studying in Montessori schools at least from their primary education to secondary education. The select Montessori schools would cater to the educational needs of the students at least from 1st standard or previous years of education to 7th standard with Montessori program. The children took admission at later stage or change in education method was excluded from the study. Irrespective of the geographical area of select districts the Montessori schools which fulfil the study criteria were included in the present research.

2. Children of Traditional Education:

The samples of the above group were selected only from the schools which offer education purely through traditional method. Within the same school any children had sought admission from Montessori schools at earlier or later stage were excluded from the study. The criteria was followed here to select the children that the children those have studied at least from 1st standard or previous years of

education to 7th standard were selected for the study.

3. Age:

The Montessori school children comprised of the third pace of age group between 14 – 16 years based on the assumption that the children who attended Montessori program in the earlier two paces of 4 – 6, and 6 – 12 years of age attain the social and emotional development to the greater extent in the 3rd pace of education. To match the groups same age group children were selected even from the traditional methods.

Tools for the Study:

1. Personal Data Sheet:

A personal data sheet was administered to the subjects in order to get the personal information of the subjects pertaining to their name, age, gender, class of study, method of education (Montessori or Traditional), domicile etc.

2. Ba-ron Emotional Quotient Inventory: Youth Version (EQ-i: YV, 2000):

This tool is a self-report questionnaire with 66 items measuring ten different components of emotional intelligence. There are five response categories such as not true, seldom true, sometimes true, often true and true. The components of emotional intelligence measured are:

Self-regard: Self-regard is the concern for one's own interest or concern for oneself or it is a respect or a sense of one's own dignity or worth.

Interpersonal Relationship: It refers to reciprocal social and emotional interactions between two people in the environment.

Impulse Control: The degree to which a person can control the desire for immediate gratification or other.

Problem Solving: It is a thought process involved in solving a problem or it is a strategy used to solve a difficult situation.

Emotional Self-awareness: It is an accurate self-assessment, where we are able to give a realistic evaluation of our strengths and limitation or it is the ability to recognize our own emotion and their effects.

Flexibility: Flexibility is an ability to adapt to different circumstances.

Reality Testing: It is an individual's objective evaluations of the external world and the ability to differentiate adequately between it and the internal world.

Stress Tolerance: Stress tolerance is an ability to tolerate stress.

Assertiveness: It is a style of behaviour to interact with people while standing up for our rights or it is the courage to be ourselves and show the world who we really are, our likes and dislikes, our thoughts, feelings and short comings.

Empathy: It is the capacity to recognize or understand another state of mind or emotion.

The Emotional Quotient Inventory was found to have high degree of reliability (Bar-on, 1997, 2000). The average Cronbach's alpha coefficient was high for all the subscales,

ranging from 0.68 to 0.86 with an overall average internal consistency coefficient of 0.76. The test-retest reliability values range from 0.78 to 0.92.

The convergent validity of this tool was found to be 0.57, the divergent validity was found to be 0.12. Moreover, the criterion group validity was established as 0.81. These values indicate that the tool is highly valid.

Statistical Techniques:

After scoring the data, the raw scores were converted into standard scores using 16.0 versions of SPSS, subsequently the mean and SD was calculated. The data was subjected to independent sample 't' analysis to find the significant difference between children of Montessori and traditional method of education.

Results and Discussion:

Table 01: Means, standard deviations and t-values for the children of Montessori and traditional school on Emotional Intelligence.

Emotional Intelligence	Montessori (N=73)		Traditional (N=66)		't' Values
	Mean	SD	Mean	SD	
Self-regard	35.99	4.07	34.35	4.87	2.15*
Interpersonal Relationship	30.44	3.76	28.83	4.81	2.20*
Impulse Control	19.59	4.65	18.76	4.38	1.08
Problem Solving	25.40	4.67	23.89	3.93	2.03*
Emotional Awareness	22.00	5.32	21.88	4.19	0.14
Flexibility	29.51	6.49	28.42	5.54	1.05
Reality Testing	21.99	4.57	19.23	3.56	3.93**
Stress Tolerance	30.25	5.68	28.62	5.42	1.72
Assertiveness	20.40	4.52	19.56	3.86	1.16
Empathy	22.22	3.85	20.94	3.65	2.00*
Total Emotional Intelligence	257.44	33.42	243.55	25.34	2.73**

* p < 0.05 level, ** p < 0.01 level

The result on self-regard variable revealed that there is significant difference between the Montessori students and traditional students at 0.05 levels with the 't' value of 2.15. It was found that Montessori children (M=35.99) have better self-regard than traditional school children (M=34.35).

In interpersonal relationship dimension the Montessori and traditional school children differ significantly at 0.05 level with the 't' value of 2.20. The mean score obtained for Montessori group is 30.44, whereas the obtained the mean score for traditional school children is 28.83, which shows that children of Montessori education have higher interpersonal relationship than children of traditional method of education.

On the problem solving dimension, the Montessori school children differ significantly from the traditional school children. The obtained mean for the children of Montessori and traditional method of education are 25.40 and 23.89 respectively, with the 't' value of 2.03, which is significant at 0.05 level. This shows that the Montessori school children are better in problem solving ability than traditional

school children.

In reality testing dimension, the two groups differ significantly at 0.01 level with the 't' value of 3.93. The mean score obtained by the Montessori school children is higher (M=21.99) than the traditional school children (M=19.23). This shows that the Montessori school children are found to be highly reality testing than the traditional school children.

On the empathy dimension, the Montessori children have higher mean (22.22) compared to the traditional school children (20.94). The two groups differ significantly at 0.05 levels with the 't' value of 2.00. This implies that the Montessori children have high empathy towards others than the traditional school children.

The study results revealed that, on the total emotional intelligence the Montessori school children have a higher scores (M=257.44) than the traditional school children (M=243.55). The t-value is 2.73, which is highly significant at 0.01 levels. The result shows that there is significant difference in emotional intelligence of children studying in the Montessori and the traditional school and that the method of education has significant effect on emotional intelligence of children, the results favouring the Montessori Method. This result is in accordance with the earlier studies. For example, Lillard and Else-Quest (2006) found significantly higher social and behaviour skill among Montessori students compared to non-Montessori students. A study by Rthunde and Csikszentmihalyi (2005) states that Montessori school students are significantly higher in social-emotional scores compared to non-Montessori students.

Whereas in other dimensions like impulse control, emotional awareness, flexibility, stress tolerance and assertiveness there is no significant difference between the Montessori and Traditional school children. But if consider mean score in above mentioned dimensions, the Montessori school children have scored higher compared to traditional school children, however, the statistical tests have not yielded significant. The results of the present study is based on pilot study conducted on smaller size. The main research of ICSSR project is in progress to verify the above hypothesis.

In Montessori Method of learning child learn in their own space and own style of learning. Each child is considered unique in Montessori Method. These concepts support Montessori students to have higher self-regard compared to traditional school children. The Montessori students are involved to do group activities and learn co-ordination among group. This helps them to have better interpersonal relationship compared to traditional method of education. Self-correction and self-assessment are an integral part of the Montessori classroom approach. The student learns to look critically at their work, and become adept at recognizing, correcting and learning from errors. This method of learning in Montessori school increases student's problem solving skill. In Montessori Method, learning is based on experimental method, where the students are thought by using equipment. The practical learning has influenced them to be more in reality testing.

Conclusions:

On the global emotional intelligence there is significant difference between the children of Montessori and traditional method of education, the results favouring the Mon-

tessori children.

Among ten dimensions of emotional intelligence, the children from Montessori Method of education have found to be having significantly higher level of emotional intelligence in 5 dimensions. It was found that the Montessori Method of education have a potential to promote high self-regard, better interpersonal relationship, problem solving skills, reality testing abilities and have better feeling of empathy.

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