

Montessori Approach in Pre-School Education and Its Effects

Ayşen ÖZEREM[1], Rahme KAVAZ [2]

[1] TMK Maths Teacher, NEU Educational Administration and Supervision Ph.D. student
aysenzozerem@yahoo.com

[2] SOS Children's Village
Nursery Director,
rahme.kavaz@soscocukyoyu.org

ABSTRACT

The aim of this study is to evaluate the efficacy of Montessori Method on pre-school children. The effect of the worldwide Montessori Approach, that is amongst many contemporary education methods, is studied at an institution in TRNC. The effect of this approach on social, cognitive and physical development of the children has been evaluated. The primary aim of Montessori approach is to enable the child explore him/herself and free that personality; thus, a convenient environment has to be set for the development of the child. How parents, teachers and pre-school institutions set such environments is also studied within this research. Additionally, the effect of the Montessori approach on children that is used by the teachers at school is also observed. The study, firstly, defines the following at the pre-school institution within the Montessori approach and then evaluates the effect of them on the children: • Which principles are used • The role of the teacher • Tools used at school • The benefits The theoretical framework of this approach is drawn at an pre-school institution where this approach is implemented in TRNC.

Keywords: *Montessori education, pre-school education, principles of Montessori education*

INTRODUCTION

The importance of pre-school education is gradually increasing in the world and in our country. Which conditions should be implemented during the education of 0-5 years old phase, as it is considered to be the foundation of an individual's development? What would be the most beneficial way for this education to reach the intended aims? Pre-school is an important phase that prepares the child for primary school. We can help the children develop their senses and learn through experience by introducing the modern pre-school teachers to a child-centred education environment as well as child-centred educational tools and equipment. The pre-school institutions in Turkish Republic of Northern Cyprus are run by the state or private sector. The pre-school education system within the state and the private sector works in different systems. As it is not possible to provide education for all preschool children by the government within TRNC, the number of paid private institutions is increasing day-by-day. The opening of such institutions is still discussed not only in terms of meeting the educational needs but also in terms of the quality and quantity of the education provided.

Pre-schools education includes the process where the educational environments are set based on the needs of the children's ages in terms of building, tools and equipment, location, teacher, education system and education programs.

As the modern education systems are rapidly changing, child-centred educational applications are being defended within the children's rights as well. Modern approaches are child-centred (Goffin, 1994) and efficient learning method is used. Efficient learning method gives children the freedom of making their own choice. Children learn about the environment in a control-free way. They decide what to do, how to do it, and which tools and materials to use. This method enables children to develop their problem solving skills, creativity and communicative skills. (Temel, 1994) A child's awareness of himself and his world can only occur when the people who have efficient roles in the child's life and

the stimulants are set based on the child's needs and their differences. This approach has introduced us to the Maria Montessori theory.

Montessori Method is based on the child's desire to learn. It helps to child to implement on his own and learn in the best and easiest way possible (Akt.Kayıllı ve vd, Oğuz ve Köksal Akyol ,2006). Pre-school phase is mostly considered to be a transition stage by the adults.

The SOS Pre-school and Nursery that was opened under SOS Children's Village name that took over the care and education of children who need protection in 1993, is also providing pre-school education since 1994.

The aim is to provide pre-school education for children under the association's responsibility and who live in the neighbourhood as well as for children who are not able to get education due to socio-economic factors in the society.

SOS Pre-School and Nursery is providing pre-school education for children between 15-60 months based on the principles of scientists like Maria Montessori and Frederich Frobel. While Maria Montessori supports the development of the child individually; Frobel supports the development of the child within a social group. Individual development of children is supported by considering the developmental differences between them that increase as they try to adapt to social life. Many studies observed that the Maria Montessori education program and the techniques and materials developed by it are convenient for this objective. These studies are administered with support from the parents and they raise the child to the anticipated levels.

Maria Montessori Education Theory

Maria Montessori, (1870 – 1952) is a scientist who earned the first female physician title in Italy. She was interested in the work of French Psychiatrist E. Donad Seguin who developed special materials for children with cognitive handicaps when she was studying at the University of Rome. She started educating children with cognitive handicaps in Rome after being inspired by Seguin's work. After observing the success of the method and the development of the children with special needs; she intended to work with normal kids using the same method. She had the chance to observe the efficacy of this method by opening classes for children between the ages of 2 and 6 in a poor neighbourhood of Rome in 1907. She called this educational environment the "Children's House" (Casa dei Bambini) (Aytaç.1981)

Montessori defends the idea that children should be enabled to learn on their own in a set environment where they choose their own materials. A pre-school environment set based on this principle includes Montessori materials on shelves to which pre-school children can reach. The learning environment is set by the teacher after objectively only by organizing the materials from simple to complex. Teachers should be good observers and only intervene when the child requires guidance.

According to Montessori, children to understand the order, harmony and beauty of the nature and they should be please with it. The rules of the nature form the basis of science and art fields. That is why; learning the rules of the nature is the foundation of science. (Montessori, 1966)

In this approach, it is crucial that the child makes mistakes by searching and trying and then, realized his own mistake and corrects it himself. If the child is not able to realize his mistake, this shows that he is not developed enough. When the time comes, the child realized his mistake and corrects it. (Temel, 1994)

The setting of the environment is important in the Montessori approach. The relationship in such an environment is not between the child and the teacher; but it is between the child and the material. The teacher only guides the correct use of the material. (Dreyer ve Rigler.1969)

It is possible to gather children between 2-6 age groups in the same environment; the children are allowed to choose the material appropriate for their age from the same environment. They do not need to play with the same material. In such an environment the younger children develop themselves by taking the older ones as models; and the older children develop the behaviour of helping the younger ones. (Onur, 1995)

Main Principles of the Montessori Approach

The principles applied in Montessori education can be listed as follows:

There are three main factors of this education: environment, child and teacher Malloy (1989).

There are 8 main principles of the Montessori Education (Wilbrandt (2011:35),

1. Movement and cognition are closely related. Movement increases thinking and learning.
2. Learning and well-being are improved when people have a sense of control over their lives.

3. People learn better when they are interested in what they are leaning.
4. Tying extrinsic rewards to an activity, like money for reading or high grades for tests, negatively impacts motivation to engage in that activity when the reward is withdrawn
 5. Collaborative arrangements can be very conducive to learning.
 6. Learning situated in meaningful contexts is often deeper and richer than learning in abstract contexts.
 7. Particular forms of adult interaction are associated with more optimal child outcomes.
 8. Order in the environment is beneficial to children.

Table 1: Developmental Phases Of A Child According To Montessori

(Wilbrandt,2011:52)

Phases	Age	Characteristics
First Phase	0-3 years	The child constructs himself through instinctive development and 'internalization'.
First Phase	3-6 years	The child gradually moves from unconscious knowledge to conscious knowledge.
Second Phase	6-12 years	The child is ready to get information about the universe. At this stage, the child shows efforts to satisfy his intellectual needs. The child is a humanistic explorer. He tries to understand his role in the society and how he can help to that role. At this stage, the children re-adapt themselves as social creatures, rational researcher of justice and problem solvers. This phase lasts for a lifetime.
Third Phase	12-18 years	

How does Montessori Approach work?

Montessori Approach serves 3 main objectives. These are motor education, affective education and language education.

1. **Motor Education:** This education starts with daily practical skills like dressing, bathing, carrying stuff, sweeping outside, taking care of plants or pets. Montessori states that flawless movements should be repeatedly observed; that the child should be taught what to do not verbally but only by demonstration. Gymnastics and rhythmic exercises are important as well as physical coordination and balance development in motor education. Montessori believes that activities required for motor education provide self-discipline, attention and good working habits. It emphasizes that these are important to develop senses and movement skills of the child for future academic learning.

2. **Affective Education:** Montessori prepared the learning toy materials for the development of senses. Doing coordinated exercises with these materials enables the child to make comparisons between materials. This enables learning through questions the similarities-differences between materials in terms on unquantifiable concepts like; shapes, colours, opposites, softness; length. The child becomes the observer. This eventually enables the child to make comparisons, make judgments and finally make a decision.

3. **Language Education:** Montessori emphasizes that the child has to realize all kinds of sounds around him and question the meanings of the sounds and thus learn the relationship between the different sounds. It is stated that this prepared the child to produce the correct sounds in the language. It is crucial that the teacher speaks clearly. It requires teaching the most commonly used tools by the students. After all the research and observation, the children will be like scientist who explore. The aim is to develop language by research and not through conversation.

4. **Literacy and Calculation:** It states that after the age of 4, children start to work on developing motor and sensual skills and prepare for academic life. Activities appropriate for literacy should also be included in that process. Arithmetic education should be prepared to help children learn about compare-contrast and numbers.

Respect for the Child: Montessori principles pay great attention to the respect shown for the child. As every child is single, the education has to be individualized for each child. Children's lives should be kept apart from adults' and should be dealt differently. (Morrison, 1988).

Absorbent Mind: According to Montessori, the individual has to be educated by himself and not by someone else. Adults use their minds to learn; and children use their senses to absorb and learn affectively. During this absorbent mind process, there are unconscious and conscious steps. Unconscious absorbent mind is usually between the ages 2-5 and it is enabled through tasting, smelling and touching. Between the age 3-6, the child separates his affectionate observations from the environment and develops conscious absorbent mind senses. The child learns differentiating and matching. (Morrison, 1988).

Sensitive Periods: Montessori states that there are sensitive periods during which the child gains some skills and the teachers should be aware of these periods. The efficient education method during the sensitive periods optimizes the learning. Efficient education is related to setting the best environment.

These periods are divided into 5;

1. The period when the needed environment is set for the child
2. The period when the environment is explored through mouth and touching and language learning
3. Walking period
4. Curiosity, interest and adoration toward objects period
5. The interest to the social aspects of life period.

The importance of set environment

Learning takes place in a well-set environment. This aims to enable the child to be independent. After the teacher provides information, the child is free to choose the work, the materials on his own and produce on his own. This will result in learning independently.

Authenticity and **naturality** plays crucial roles in the Montessori approach. In a set environment, natural and functional tools should be used as much as possible. (Iron: heat, knife: cutting, glass: feeling, etc.) (Temel, 1994)

The second important factor is the order of the set environment. The child will complete the task with the materials he has chosen; no one will intervene; after the task is complete the materials will be put back into their places according to class order; the child will contribute to the order of the environment he is living in. This will develop responsibility and self-discipline. The materials in the classroom have to be natural and authentic.

The peaceful environments will develop the child's personal discipline. (Calvert, 1986)

Pre-School Materials in the Montessori Approach

The rules for using the material are shown to the child. At the end of each activity, the child puts the materials back into their places. This behaviour becomes habitual after repeating it constantly.

Some materials are worked with on a special carpet. It is the child's responsibility to carry these materials to the carpet and back to their shelves after the activity. The child is guided towards that behaviour.

The child actively learns as he uses these materials. Prepared information is not permanent and efficient in a child's mind.

Materials are meaningful for the child and they have 5 main factors:

1. The challenge or the mistake the child experience through exploring should be a part of the material.
2. The shape and usage of the materials should be ordered from simple to complex.
3. Materials should prepare the child for the next learning.
4. Materials provide not the concrete shape of an idea but its abstract form.
5. Montessori materials are prepared for the child's individual learning.

Role of the teacher in Montessori Approach

The role of the teacher in Montessori approach is to change and organize the environment according to the child's needs and in a way that will help the child to develop. The materials should be ordered from simple to complex by the teacher as well. Montessori teacher is called guide/router. The teacher gives the child a chance to use his/her potential. (Linard,1972)

The teacher has to set an example with the outlook, appearance and personality for the children; the teacher has to give a sense of respect. Teacher is required to be flexible, humanist, affectionate, patient and understanding. (Temel, 1994)

Montessori teacher makes a lot of time for family and social life. Teacher organized the environment in a way that the child will be free to move, communicate and share with his friends.

Studies done on Montessori Education:

In his study, Tzuo (2007) believed that children are enabled to make free choices by using the Montessori materials; that children have the power to learn on their own; and that Montessori education is a factor that complements the role of the teacher.

McCarty (2007) stated that instead of homework, children were inspired by Montessori education and they become more creative at their life outside school.

Both disabled and non-disabled children took part in Eratay's study (2011). Both groups showed developmental improvements and this proved that the program has individual features and meets the needs arising from individual differences.

THE AIM OF THE STUDY:

The aim of this study is to evaluate the efficacy of Montessori Method on pre-school children. The effect of the worldwide Montessori Approach, that is amongst many contemporary education methods, is studied at an institution in TRNC.

Significance of the study:

This study is the first in TRNC to investigate the effects of the Montessori approach on pre-school children in terms of creativity, self-care, problem solving and social skills. Thus, the study was carried out at SOS Pre-school as it is the first school to implement the Montessori Method in TRNC.

Working group:

A study group was chosen to carry out this research in order to investigate the relationship between the development of pre-school children and the Montessori education method. The study group included: 9 pre-school teachers who worked at SOS in 2012-2013 and 10 parents. The features of the 9 pre-school teachers are: 55% of the teachers were between 22-24 years of age, 45% was between 36-44 years of age; 55% had 5 years or less professional experience while 45% had professional experience between 6-20 years. 44% of the teachers had graduate education, 45% are graduates from vocational child development schools and 11% are still pursuing on-going graduate degrees. 44% of the teachers had Montessori Training that lasted for 1.5 years.

The Problem of The Study

What is the level of using Maria Montessori approach among 4-5 age groups at SOS in TRNC? The following sub-problems will be tried to answer in order to come up with an answer to the main research question:

- 1) What is level of family participation within the Montessori approach at SOS?
- 2) What is level of creativity of students who get Montessori education at SOS?

- 3) What is students' self-care level who gets Montessori education at SOS?
- 4) What is the level of students' problem solving skills that get Montessori education at SOS?
- 5) What is level of social skills of the students who get Montessori education at SOS?

METHOD

The data collected in this study have been gathered by the researchers qualitatively in the form of observations and interviews. The qualitative interview questions ask the participants their perceptions, feelings, beliefs, intentions and experiences on the subject of the study.

Data Analyses:

The findings from the interview forms were analysed using the content analysis method. The data collected from the interview questions that were interpreted through content analysis, have been analysed using the percentages and frequencies from the descriptive statistics.

Content Analyses:

It is defined as the process of summarizing and specifying the main content of the documents and the message they include (Cohen ,Manion and Marrison(2007)).

It is aimed to define the data and bring out the hidden truth of the data thorough content analysis. (Gülbahar and Alper 2009). Four steps were followed in order to process the qualitative data through conten analysis:

Coding the data,
Finding the themes,
Organizing the codes and the themes,
Defining and interpreting the findings (Yıldırım&Şimşek (2006)).

DATA COLLECTION INSTRUMENT:

Data was collected through observation, interview and document review in this study. Interview is to state perceptions, perspectives, experiences, and emotions and enter into an individual's inner world and understand his/her perspective. We try to understand concepts that cannot be observed such as attitudes, thoughts, intentions, comments, perceptions and reponses through interviews. The main duty of the interviewer is to enable the interviewee to give sincere responses. Written documents were used to collect data.

Standardized open ended interview method was used to collect the data. Interview questions were carefully written and they followed a certain order. Questions were asked in the same order and same style to all individuals. Flexibility was limited. Interviewer reduced subjectivity. 2 experts were consulted while preparing the interview questions. Validity of the questions was assembled by carrying out a pilot study. Several factors were considere when preparing the interview questions: writing questions that are easy to understand, asking questions that are focused, asking open-ended questions, avoiding manipulation, avoid asking multi-dimensional questions, preparing alternative and trigger questions, asking different kinds of questions, and organizing questions in a logical way. (Yıldırım &Şimşek)

PERIOD OF THE STUDY:

The study was carried from September until the end of November of the 2012-2013 Academic Year at the SOS Pre-school. During this period, teachers and parents have been interviewed about the educational period that was planned based on the Montessori Method.

Study pattern:

The pattern of the study is the « phenomenologic» pattern. This pattern focuses on the phenomena that we are aware of but do not have a deep and detailed understanding. (Yıldırım &Şimşek(2011:74)

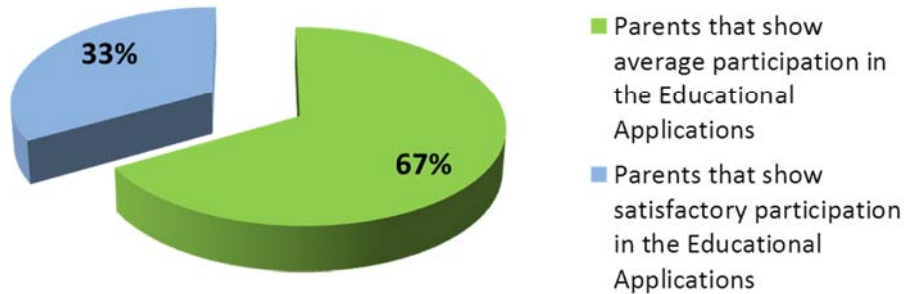
FINDINGS

Findings and Interpretation about the First Sub-problem

Findings about the first sub-problem

The first sub-problem of the research has been defined as: “What is the level of family participation within Montessori approach at SOS?” The findings gathered from the interviews with the teachers related to this first sub-problem are as follows:

Parents' Participation Rate to the Educational Applications according to Teachers



As you can see from Graphic 1, teachers who work in Montessori class stated the participation rate of the parents as 66.7% “average” and as 33.3% “satisfactory”. They also added that all parents ask about what their children do at school.

Additionally, the following views of the teachers who participated parallel in this study are also important:

“the parents of our children usually ask about what their children do at school. They also participate in the school activities whenever they have a chance....”) (t1)

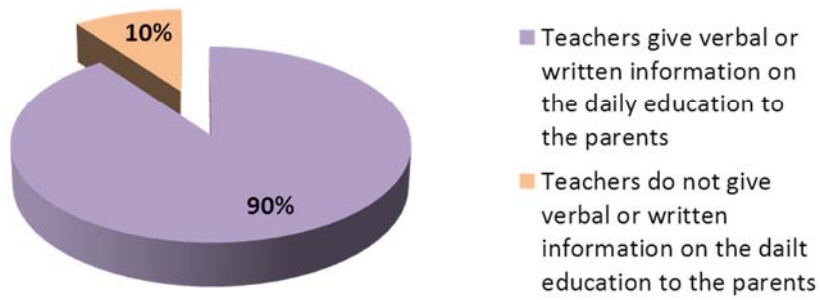
“ ...parents ask what their children do during the day at school or if they eaten their meal or not...” (t2)

“... parents want to get detailed information on what their children do at school. They usually get more information on self-care, adapting to school, their emotional state rather than the activities at school...”(t4)

90% of the parents believe that teachers give information on daily activities either verbally or written. Besides,

100% of the parents believe that the education helps their children to develop.

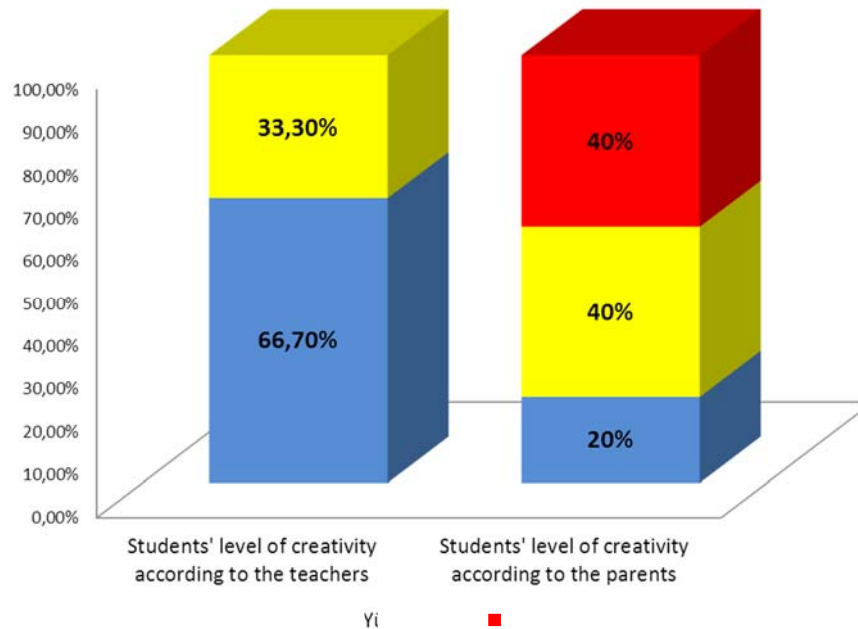
Teachers' Rate of Informing on the Education Programme according to the Parents



In conclusion, these findings show that parents are closely interested in their children's lives; they try to learn what their children do at school and try to participate in the activities.

Findings and Interpretation on the Second sub-problem

The second sub-problem of the study was: “what is the creativity level of the students who get Montessori education at SOS?” The findings gathered from the interviews with the teachers related to this first sub-problem are as follows:



The teachers of the Montessori class stated the students' creativity level as 66.7% “high” and 33.3% as “average”.

Additionally, the following views of the teachers who participated parallel in this study are also important:

“...at young ages, especially creative thinking, dreaming, forming stories are emphasized. When we talk with the children without limiting them and only by stimulating their instinct, great ideas come out...” (t4)

“...saying that a simple line looks like a horse, tree, etc. in a free drawing activity...” (t2)

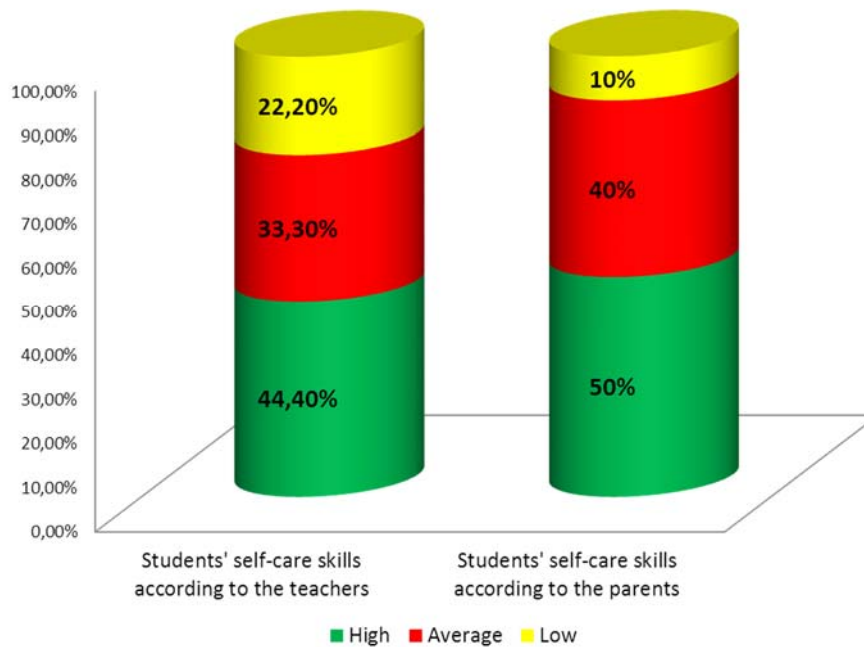
“...all activities are planned according to the children's performance...” (t8)

Parents see their children's creativity as: 40% low; 40% average and 20% as high.

In light of these findings it can be said that students to get Montessori education at SOS have a high level of creativity.

Findings and Interpretation on the third sub-problem

The third sub-problem is: “what is the level of self-care of the students to get Montessori education at SOS?” The findings gathered from the interviews with the teachers related to this first sub-problem are as follows:



Teachers who participated in this study stated the level of self-care of their students as: 44.4% high; 33.3% average; and 22.2% low.

Additionally, the following views of the teachers who participated parallel in this study are also important:

“..the use of toilet and lavatory on their own changes depending on the month and age. Children pay attention to the cleanliness of their clothes and belongings....”(t5)

“I don’t believe that they gain independence as it is not possible to do personal cleaning and care without help due to age reasons...”(t4)

“...our students are able to use the toilets and lavatory on their own. Most of them pay attention to the cleanliness of their clothes, belongings and their bodies. They are very close to being independent in terms of self-care skills....”(t1)

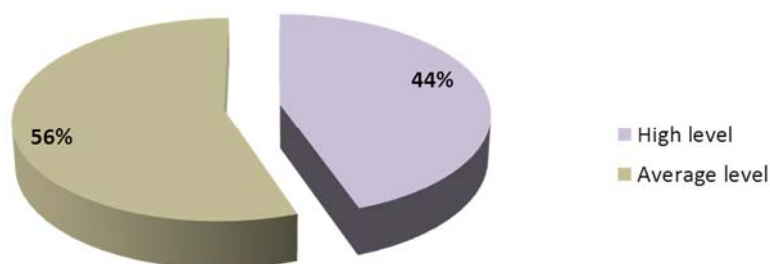
The parents defined their children’s self-care skills as: 10% low; 40% average; and 50% high. The views of the teachers and the parents are close and they mostly show consistency.

To conclude, it can be said that most of the students show satisfactory self-care skills.

Findings and Interpretation on the fourth sub-problem

The fourth sub-problem is: "What is the level of problem-solving skills of the students who get Montessori education at SOS?" The findings gathered from the interviews with the teachers related to this first sub-problem are as follows:

Students' problem solving skills



Teachers stated that 44.4% of the children have high problem solving skills and 55.5% show average problem solving skills. Additionally, the following views of the teachers who participated parallel in this study are also important:

"...students sometimes ask for help. For example, when they are making a puzzle or putting in pieces together they try by rotating the piece. In such a case, the student tries to find the solution himself. If the puzzle pieces are complex, they ask for the help of the teacher and they do the first round together. When they do the same puzzle for the second time, they do not ask for help..." (t2)

"...they call out to the teacher and ask for help by saying that they can't do it..." (t5)

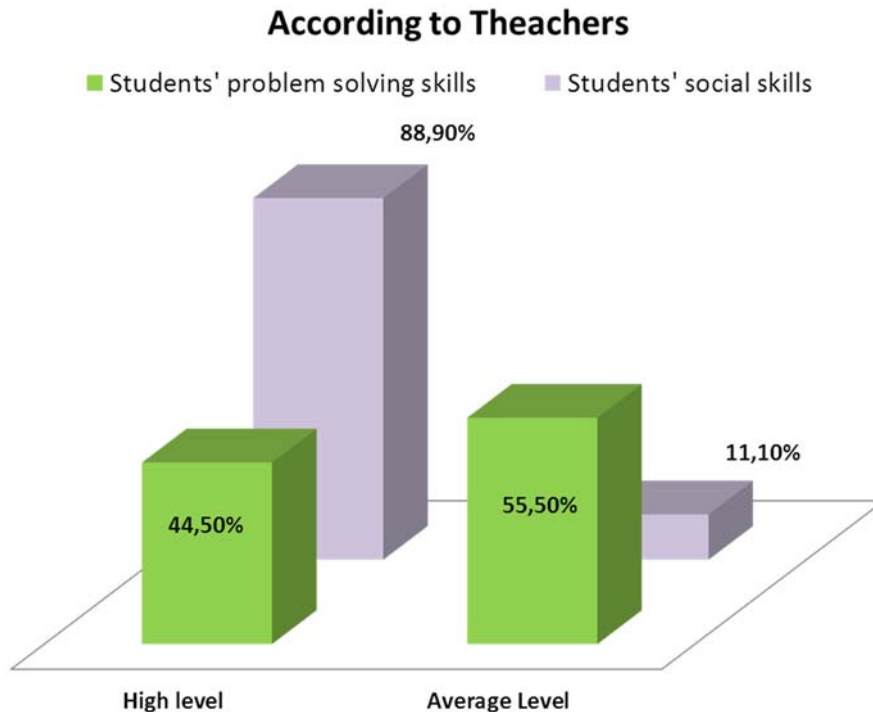
"...when there is a conflict between the student about sharing a toy, they first ask for the help of the teacher. Then, they realize they can solve the problem on their own with the guided questions of the teacher. This way, children become capable of solving their problem without asking for help in future..." (t4)

Parents' views on their children's problem solving skills are as follows: 10% show low level; 70% show average level; and 20% show high level of problem solving skills. The difference between the views of the teachers and the parents is due to the varying level of problem solving skills shown by the student at school among his peers and at home with his parents. It is suggested to strengthen the communication between the school and the parent collaboration.

In conclusion, students get help from their teachers when they are gaining the problem solving skills. They realize how they can solve the problem with the guidance of their teacher.

Findings and Interpretation on the fifth sub-problem

The fifth sub-problem of the study is: “What is level of social skills development of the children who get Montessori education at SOS?” The findings gathered from the interviews with the teachers related to this first sub-problem are as follows:



88.9% of the teachers stated their students’ social skills as ‘high’ while; 11.1% of the teachers said that social skills of the students were ‘average’.

“...when children first start school, they observe their friends and teachers. Trust is formed at the end of the observations...” (t2)

“...children who can express themselves verbally are able to communicate, tell their problems easily to their teachers or friends...”(t4)

“... teachers have strong dialogues with their friends. Their relationship with the teacher is like mother-child. They can easily form dialogues with the other party; start and maintain a communication. They can also start conversations easily with the interns coming to school...”(t3)

“...students play lego, ball or family games with their friends...they can communicate verbally and physically...”(t5)

Parents’ view on the social skills are as follows: 10% of the parents say it is ‘low’; 30% of them say it is ‘average’ and 60% of them said it is high. The difference between the views of the teachers and the parents is due to the high level of social skills shown by the students among their peers at school. They show lower social skills with parents or outside school. To conclude, it can be interpreted that students’ have high social skills.

RESULTS:

1. Family participation rate is pleasing within the Montessori approach at SOS. The reason for this is that families are able to get information on school system and the education system as well as getting a chance to communicate with the teachers as they drop or pick their children from school.
2. It is possible to say that the creativity of the children at SOS, who get the Montessori education, is at a satisfactory level based on their age and developmental features.
3. The main problem of this study is taken as the Maria Montessori approach brings out the children's creativity. Based on this, it can be said that there is a relationship between this approach and learner-centred education.
4. It can be stated that the self-care skills of the children at SOS who get Montessori education are mostly satisfactory. This can be interpreted as the school and the parents provide necessary opportunities for the children to develop their self-care skills.
5. The problem solving skills of the children at SOS, who get the Montessori education, are at satisfactory level.
6. In the light of these findings, it can be said that the following are all important factors: the child expressing him/herself; being listened to by an adult; and giving the chance to make his/her own decisions.
7. It is possible to observe that the social skills of the children at SOS, who get the Montessori education, are at high levels. This can be related to the implementation of group work as well as collaborative applications.

Suggestions:

1. New curricular programs can be prepared for other pre-school institutions in Northern Cyprus based on the Montessori Method.
2. We suggest communal support for institutions like SOS that use this approach at high levels.
3. Pre-school teachers can be trained on Montessori Method by organizing seminars.
4. The effect of Montessori education on other development fields of children can be evaluated.

REFERENCES:

- Aytaç.K (1981) Contemporary Educational Movements Ankara: University of Ankara Faculty of Language, History and Geography Publications: 265.
- Calvert, P (1986) Responses to Guidelines for Developmentally Appropriate Practice for Young Children And Montessori ERIC Ed 280558
- Çağlar,D.(1979).Education of Mentally Retarded,(2nd Ed.).Ankara: University of Ankara, Faculty of Education Publications .No:82.106-108.
- Dreyer, A. S. ve D. Rigler, Cognitive Performance in Montessori and Nursery School Children, Journal of Educational Research.62:9, 411 - 416.
- Eratay ,E.(2011). The Efficacy of the Montessori Method, Journal of Pegem and Education 1,11-19.
- Goffin. G:S (1994) Curriculum Models and Early Childhood Education, Macmillan Collage Publishing Company, New York
- Koçyiğit, S., Kayılı, G. ve Erbay, F. (2010). Investigating the Effect of Montessori Method on the Receptive Language Skills on 5-6 year olds, Journal of Turkic Studies.
- Lillard, P.P (1972) Montessori Modern Approach. Shocken Books New York.

Mallory, T.(1989).Montessori and Your Child: Parents' Guidebook. Trans: Füsün and Cihan Gülten). Hatibođlu Publishing, p.88,Ankara.

Montessori, M. (1966) The Montessori Method İnteroduction by J. Mc. V Hunt. Seventh Printing. New York. Schocken Books

Morrison, G. S. (1988) Early Chilhood Education Today, Melbourne: Merril Puplishing Company,

Onur, B (1995) Child and Teenage Development. 2nd Ed. Ankara: İmge Bookstore

Temel. Z,F.(1994) "Montessori views and Educational Approach" Journal of Pre-school Education, 26(47), 18-22.

Wilbrandt,E.(2011). Montessori Approach in Pre-school Education. Kk Publishing. Ankara.