



**EVALUATION OF MONTESSORI METHOD FOR TEACHING MENTALLY  
RETARDED STUDENTS BASED ON THE OPINIONS OF SPECIAL  
EDUCATION TEACHERS**

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**ABSTRACT**

The present study aims to evaluate the use of Montessori Method for teaching Mentally Retarded Students (MRS) based on the opinions of special education teachers. Opinions of special education teachers on the use of Montessori Method for teaching MRS were analyzed based on the following criteria: gender of special education teachers, whether they are informed about Montessori Method, whether they are trained about Montessori Method, being employed in an educational institution having adopted Montessori Method, their bachelor degree, their seniority and length of service, the duration of their service in a special education institution, type of the special education institution they are working for. Furthermore the opinions of the special education teachers were collected on following issues: the comparison of the effect of Montessori Method on people of normal intelligence and people with MR, practicability of Montessori Method in Turkey, student-centered educational practices, setting the students free for their choices, presence of older and younger students in the same classroom. Quantitative and qualitative approaches were used together in the survey model of the research. Participants of the study were composed of 163 special education teachers working with students who have mental retardation in special education institutions and special education and rehabilitation centers affiliated to the Ministry of National Education. Of the participants, 108 were male and 54 were female. Of the

special education teachers, 109 have been working for 1-5 years; 23 have been working for 6-10 years; 15 have been working for 11-15 years; 16 have been working for 16 years and more. Of the teachers, 36 have been working for mild special education classrooms; 38 have been working for independent Special Education Schools; 13 have been working for Special Vocational Schools; 23 have been working for moderate-severe special education classrooms and 64 have been working for Rehabilitation Centers. Questionnaire developed by researches for practicability of Montessori Method for teaching MRS by special education teachers was used as data collection tool. Cronbach's Alpha was 0,831 according to reliability study conducted with 258 people for the questionnaire. Researchers visited the schools and met the teachers and questionnaires were filled by participants. Qualitative data of the research was analyzed through descriptive approach. Data were analyzed for quantitative data and they were determined to be normally distributed. Afterwards, of the parametrical tests, t test, Anova and Tukey's test were used for analysis. According to research results, special education teachers have moderate opinions about the use of Montessori Method in teaching MRS. Factors such as special education teachers' being trained about Montessori Method, being informed about Montessori Method, being employed in an educational institution having adopted Montessori Method and the duration of their service as special education teacher did not create any difference in the opinions of teachers on practicability of Montessori Method in teaching MRS. Female special education teachers think that Montessori Method may be adopted in teaching MRS more commonly. Opinions held by the teachers graduated from the department of child development are more positive than the opinions of teachers graduated from the department of special education for using Montessori Method in teaching MRS. There is difference in the opinions of the teachers about the use of Montessori Method in teaching MRS according to the type of educational institution they are working for. Accordingly, teachers working in special-education classroom within a regular school have more positive attitudes than teachers working in independent special education institutions, moderate-severe special education classrooms, rehabilitation centers and special vocational schools. The majority of the participants think that Montessori Method may be applied in Turkey for teaching MRS. Special education teachers approve walking freely around according to this method however they point out that

presence of older and younger students in the same classroom may result in disciplinary problems. Participants indicate that Montessori education may be effective for people of normal intelligence.

**Keywords:** Maria Montessori, Montessori Method, Mentally Retarded Students, Special Education Teachers

### **MONTESSORI METHOD**

Maria Montessori (1870-1952), Italy's one of the first female physician, a pedagogue and a professor of anthropology developed a pedagogy which might be adopted for each and every child. This pedagogy is prepared according to the characteristics of the child taking personal skills and fields of interest into consideration. Montessori introduced her method with Children's House (Casa dei Bambini) which was opened in 1906. While this method was primarily focused on preschool children, its practice developed gradually in a manner to encompass other educational levels in time (Korkmaz, 2006) and the number of schools having adopted Montessori Method has reached thousands (Brehony, 2000).

The aim of the Montessori education which is based on personal education is to enable student to be independent and to prepare optimum environment where student can find everything and his development is supported. Thanks to active participation, students acquire the freedom of choice and they choose the educational materials and decide what and how to do on their own and acquire achievement for problem solving, creativity and communicative skills (Temel, 1994). Montessori education aims not only to transfer knowledge but also to stimulate the desire of the student to research and learn.

Absorbent Mind is the basis of Montessori approach. Absorbent mind aims to reveal the mental activities of the child. The child is never forced to attain mental achievements with the Montessori approach. The child is provided with an intentionally prepared environment and Montessori materials in order to discover this environment. Development of the child is supported through these materials. Materials are organized within the reach and vision of children with a hierarchic order from simple to difficult and from tangible to intangible and they are designed in a manner to enable children to perform control of error. Thus teacher does not tell the error of the child and child explores the right option on his own (Gürsoy and Yıldız-Bıçakçı, 2009). Teacher allows

the children to enjoy the freedom of exploring and encourage children to help each other (Tuckman, 1991).

Children who are engaged in objects of daily life learn tasks related to practical life in the educational environment of Montessori. Interesting chores such as dusting, drying the wet areas, removing the stains, rolling the carpets, laying the carpets are among these tasks. These practices are performed not just for developing the self-care skills of the child; they are also performed for satisfying the tactile need of the child. This is due to the fact that children are able to realize the different tactile features of the materials by touching and feeling the materials and this process supports the cognitive development. Hand movements employed during the chores are closely related to human intelligence. Thus numerous chores performed by the child introduce important opportunities for the cognitive development of the child (Durakoğlu, 2011).

“Individuality of child” is at the forefront of Montessori approach. Each child has his own development (Sarıaydın, Tekbaş, Tuncay & Akgün, 2009). So Montessori Method has been used for teaching mentally retarded children (Hellbrügge, 1978). Montessori had carried out practical activities for teaching mentally retarded children since 1898 and performed the first pedagogic observations and experiences thereof. (Kramer, 1976; cited by Singh, 2005)

Montessori followed an approach which focused on training the sense organs of disabled children by means of the instructional materials she developed. This approach enabled disabled children to become more successful than normal children trained with other methods. The achievement of Montessori astonished the people around. However she asserted that this difference resulted from poor educational opportunities provided for normal children (Çağlar, 1979, p. 107).

Montessori stated that the function of the teacher is not to speak but to prepare a special environment for the child. The most important and urgent task to be completed by the teachers is to recognize the unknown child and release him from his restraints. If children are able to notice the errors without the intervention of the teachers and parents, the environment enables the children to learn on their own. Teachers and parents should be mere spectators. Furthermore all activities of the children should be respected and effort should be exerted to understand them (Asher, 2010). The teacher is

the person who enables the children to move freely in the intentionally prepared environment, has sufficient information on human development and growth, has the skill to make observations in order to meet developmental needs of the children through materials and various activities and motivates the children to learn. The mission of the teacher is not to impose his knowledge and experiences but to enable children to use their own potential for their development. Montessori teachers exert effort to make the children acquire appropriate methods teachers observe for effective learning, facilitation, orientation and guidance while developing observational skills of the children (Morrison, 1998 & Coe, 1991: cited by Oğuz & Köksal Akyol, 2006).

The teacher should be aware of the children's development and he should be able to implement techniques, materials and ideas included by Montessori Method. These include environmental organization, making presentations, introducing the students to each other at the beginning of academic year, meeting the needs of as many students as possible each day. The most important task is to ensure discipline in the classroom. This may be achieved by being a model and a guide for proper behaviors towards students. The teacher should be able to perform his roles as a guide, model, observer and reporter (North American Montessori Center: NAMC, date is unknown). Although the origin of Montessori Method is based on Special Education, it has become widespread in preschool education both in Turkey and the world and its association with the special education has been neglected. While Montessori Method is available in preschool education in Turkey, the practice of Montessori Method for special education is very rare. The main reason thereof is that special education teachers do not use this method. Negligence of special education teachers for using Montessori Method in teaching MRS may be associated with their opinions and knowledge in this field. However there are not researches on this subject. The practice of Montessori Method for teaching MRS will be useful in Turkey.

Prior to introduction of these practices, opinions of special education teachers on the use of Montessori Method for teaching MRS will be a needs analysis. The present research aims to evaluate the opinions of special education teachers about Montessori Method according to different variables. Thus the use of Montessori Method for teaching MRS was evaluated based on the opinions of special education teachers. Opinions of special education teachers on the use of Montessori Method for teaching

MRS were analyzed based on the following criteria: gender of special education teachers, whether they are informed about Montessori Method, whether they are trained about Montessori Method, being employed in an educational institution having adopted Montessori Method, their bachelor degree, their seniority and length of service, the duration of their service in a special education institution, type of the special education institution they are working for. Furthermore the opinions of the special education teachers were collected on following issues: the comparison of the effect of Montessori Method on people of normal intelligence and mentally retarded people, practicability of Montessori Method in Turkey, student-centered educational practices, setting the students free for their choices, presence of older and younger students in the same classroom.

## **METHOD**

Quantitative and qualitative approaches were used together in the survey model of the research. Participants of the study were composed of 163 special education teachers working with students who have mental retardation in special education institutions and special education and rehabilitation centers affiliated to the Ministry of National Education. Of the participants, 108 were male and 54 were female. Of the special education teachers, 109 have been working for 1-5 years; 23 have been working for 6-10 years; 15 have been working for 11-15 years; 16 have been working for 16 years and more. Of the teachers, 36 have been working for mild special education classrooms; 38 have been working for independent Special Education Schools; 13 have been working for Special Vocational Schools; 23 have been working for moderate-severe special education classrooms and 64 have been working for Rehabilitation Centers.

Questionnaire developed by researches for practicability of Montessori Method for teaching MRS by special education teachers was used as data collection tool. Literature review was performed during the development of the questionnaire and the expert opinion was obtained after the items had been determined. The questionnaire was finalized following the preliminary practice with 10 special education teachers. Cronbach's Alpha was 0,831 according to reliability study conducted with 258 people for the questionnaire. The questionnaire was reliable according to this figure. Researchers visited the schools and met the teachers and questionnaires were filled by

participants. Qualitative data of the research was analyzed through descriptive approach. Data were analyzed for quantitative data and they were determined to be normally distributed. Afterwards, of the parametrical tests, t test, Anova and Tukey's test were used for analysis.

### FINDINGS AND INTERPRETATION

Considering the opinions of special education teachers on the use of Montessori Method for teaching MRS, total score regarding the opinions of special education teachers on the use of Montessori Method for teaching MRS and their percentage according to possible maximum total were calculated. The data is shown in Table 1.

Table 1; Opinions of special education teachers on the use of Montessori Method for teaching MRS

O	Items regarding Montessori Method for teaching MRS	Total	%
1	23. Each child is different according to Montessori.	749	86,09
2	25. Children are free to walk freely around the Montessori classrooms. However they cannot use the other parts of the school at will.	735	84,48
3	17. According to Montessori the simplest method of teaching is memorization.	734	84,37
4	24. Materials should be placed within the reach of children in Montessori classrooms.	720	82,76
5	28. Mutual respect is essential in Montessori classrooms.	717	82,41
6	14. An environment setting the children free should be prepared in Montessori education.	709	81,49
7	42. Hand-eye coordination of the child is developed in Montessori Method.	701	80,57
8	19. Emotional and social development of children may be supported with Montessori education.	699	80,34
9	40. Children should be made to perform practical life-related practices with Montessori Method.	696	80,00
10	34. Children get the opportunity to repeat as much as possible in Montessori classrooms.	690	79,31
11	18. According to Montessori, knowledge should be materialized and transferred as a whole.	674	77,47
12	29. Skills regarding daily life should be taught by Montessori Method.	674	77,47
13	2. Montessori Method is not effective for normal people.	671	77,13
14	10. The origin of Montessori Method is the child.	671	77,13
15	15. According to Montessori, development of peers is same.	668	76,78
16	22. According to Montessori, individual learning occurs within the environment.	663	76,21
17	33. All materials of Montessori are natural.	656	75,40

18	11. Montessori Method thinks that all children have the same learning rate.	648	74,48
19	4. Montessori Method is currently used just for mentally retarded individuals.	647	74,37
20	39. Children plant trees and each child is responsible for caring for that plant every day in Montessori schools.	647	74,37
21	16. According to Montessori, all children have similar capacities.	638	73,33
22	37. Writing skills of the children are supported by Montessori Method.	633	72,76
23	31. Language education is provided in Montessori Method.	619	71,15
24	35. Education of the senses is not available in Montessori Method.	615	70,69
25	13. Children have to follow a program prepared by adults in Montessori Method.	611	70,23
26	32. According to Montessori, education should be programmed and it should not change according to life.	609	70,00
27	3. Children of 3-9 ages are included in Montessori Method.	597	68,62
28	30. Montessori Method does not include mathematics and cosmic (Universal learning activities) educational activities.	594	68,28
29	7. Characteristics of the children are of secondary importance for Montessori Method.	588	67,59
30	9. Children should not be let to choose in Montessori Method.	579	66,55
31	38. It is not necessary to introduce all problems a child may encounter in daily life within the course of Montessori Method. The most important ones are sufficient.	579	66,55
32	21. According to Montessori, presence of older and younger students in the same classroom damages the self-confidence of younger students.	578	66,44
33	20. According to Montessori, presence of different aged students in the same environment is risky.	573	65,86
34	5. According to Montessori, children cannot mentally think any action that they do not actually take.	571	65,63
35	6. Children check their own errors in the Montessori Method.	559	64,25
36	26. Activities should be chosen by teacher in the Montessori Method.	538	61,84
37	8. There are not books in the Montessori Method.	531	61,03
38	12. According to Montessori, children do not like rewards and punishments.	520	59,77
39	1. Montessori Method was firstly used for mentally retarded individuals.	488	56,09
40	41. Children are required to have developed fine and gross motor skills in order to receive Montessori education.	459	52,76
41	27. All materials should be available with some reserves in Montessori classrooms.	414	47,59
42	36. Skills regarding the daily life of child should solely be practiced with non-living things in Montessori Method.	367	42,18

According to Table 1, special education teachers had knowledge around 80% and above about the following items: Each child is different according to Montessori



Method; children are free to walk freely around the classrooms; however, they cannot use the other parts of the school at will; all materials should be placed within the reach of children in classrooms; mutual respect of children is essential; an environment setting the children free should be prepared; hand-eye coordination of the child is developed; emotional and social development of children may be supported with the method; practical life-related practices should be performed. However teachers had an erroneous conceptual perception that knowledge should be memorized in Montessori Method.

Special education teachers were not well-informed about following aspects of Montessori Method: children cannot mentally think any action that they do not actually take; children check their own errors in the Method; there are not books in the Method; according to Montessori, children do not like rewards and punishments. Although it is not available in Montessori Method, they did not agree with the idea that “Children are not required to have developed fine and gross motor skills in order to receive Montessori education”. Participants were aware that it was not necessary to have materials with reserves and skills regarding the daily life of child cannot solely be practiced with non-living things; however they got solely 56.09% about the knowledge that Montessori Method was firstly used for mentally retarded individuals. This indicates that special education teachers are not aware that this Method may be used for teaching MRS.

Table 1 shows the opinions of teachers regarding the items which are included in the questionnaire for determining the opinions of special education teachers on the use of Montessori Method for MRS i.e. data collection tool of the research and items which are not related to Montessori Method.

When Table 1 is analyzed, it is clear that majority of items which are not related to Montessori Method is listed successively according to order of total scores of items included in the research. It points out that special education teachers have approximately similar opinions on the items which are not related to Montessori Method.

The present study examined whether the scores of special education teachers about the use of Montessori Method for teaching MRS differed according to following factors: gender of special education teachers, whether they are trained about the

Method, whether they are informed about the Method, being employed in an educational institution having adopted Montessori Method. Findings thereof are shown in Table 2.

Table 2: Average Attitude Scores of Teachers about Montessori Method

Variable		N	X	sd	t	P
Gender	Female	114	152,30	12,94	3,55	0,001
	Male	60	144,45	14,58		
Montessori training	Yes	41	149,03	14,56	-,247	0,805
	No	133	149,72	14,52		
Being informed about Montessori Method	Yes	41	150,75	14,87	0,587	0,558
	No	133	149,23	14,41		
Being employed in an educational institution having adopted Montessori Method	Yes	10	144,66	3,823	-	0,223
	No	164	149,95	1,14		

As can be seen from Table 2, average score of female teachers about the use of Montessori Method for teaching MRS was 152.30 and average score of male teachers about the use of Montessori Method for teaching MRS was 144.45. There was a statistically significant difference between the scores of two groups ( $t=3.55$ ,  $p<0.05$ ). Accordingly, opinions held by female teachers about the use of Montessori Method for teaching MRS were more positive.

Average score of teachers who were trained about Montessori Method about the use of Montessori Method for teaching MRS was 149.03; average score of teachers who were not trained about Montessori Method about the use of Montessori Method for teaching MRS was 149.72. The difference between the scores of two groups was not statistically significant ( $t= -.247$ ,  $p>0.05$ ). Accordingly, opinions of teachers who were trained about Montessori Method and who were not trained about Montessori Method about the use of Montessori Method for teaching MRS were similar.

Average score of teachers who were informed about Montessori Method, about the use of Montessori Method for teaching MRS was 150.75; Average score of teachers who were not informed about Montessori Method, about the use of Montessori Method

for teaching MRS was 149.23. The difference between the scores of two groups was not statistically significant ( $t= 0.587, p>0.05$ ). Accordingly, opinions of teachers who were informed about Montessori Method and who were not informed about Montessori Method about the use of Montessori Method for teaching MRS were similar.

Average score of teachers who were employed in an educational institution having adopted Montessori Method, about the use of Montessori Method for teaching MRS was 144.66; average score of teachers who were not employed in an educational institution having adopted Montessori Method, about the use of Montessori Method for teaching MRS was 149.95. The difference between the scores of two groups was not statistically significant ( $t= -1.222, p>0.05$ ). Accordingly, opinions of teachers who were employed in an educational institution having adopted Montessori Method and who were not employed in an educational institution having adopted Montessori Method about the use of Montessori Method for teaching MRS were similar.

Data were analyzed through Anova method in order to determine whether the opinions of teachers on the practicability of Montessori Method for students with special educational needs differed according to following factors: seniority of teachers, their bachelor degree, the duration of their service in a special education institution, type of the special education institution they are working for. Findings thereof are shown in Table 3.

**Table 3: Opinions of special education teachers on the practicability of Montessori Method for students with special educational needs according to seniority of teachers, their bachelor degree, the duration of their service in a special education institution, type of the special education institution they are working for**

Variable		Sum of Squares	df	Mean Square	F	p
Duration and seniority of their service as a teacher	Inter group	88,962	3	29,654	0,139	0,936
	Intra-group	36241,067	170	213,183		
	Total	36330,029	173			
the duration of their service in a special education institution	Inter group	525,405	3	175,135	0,832	0,478
	Intra-group	35804,624	170	210,615		
	Total	36330,029	173			
Bachelor Degree	Inter group	1799,630	3	599,877	2,953	,034

	Intra-group	34530,399	170	203,120		
	Total	36330,029	173			
type of the special education institution	Inter group	4566,551	3	1522,184		
	Intra-group	31763,478	170	186,844	8,147	,000
	Total	36330,029	173			

When the average score of special education teachers about the practice of Montessori Method for teaching MRS was analyzed according to duration of their service as a teacher, there was not a significant difference on the inter group basis ( $F= 0.139$ ,  $p>0.05$ ). Accordingly, seniority of teachers and length of service did not affect the opinions of teachers on the use of Montessori Method for teaching MRS.

When the average score of special education teachers about the practice of Montessori Method for teaching MRS was analyzed according to the duration of their service in a special education institution, there was not a significant difference on the inter group basis ( $F= 0.832$ ,  $p>0.05$ ). Accordingly, duration of special education teachers' service in a special education institution did not affect the opinions of teachers on the use of Montessori Method for teaching MRS. When the average score of special education teachers about the practice of Montessori Method for teaching MRS was analyzed according to bachelor degree of special education teachers, there was a significant difference on the inter group basis ( $F= 2.953$ ,  $p>0.05$ ). Accordingly, bachelor degree of teachers affected the opinions of teachers on the use of Montessori Method for teaching MRS. Tukey's test was used in order to comprehend the origin of the difference. Results thereof are shown in Table 4.

Table 4: Opinions of special education teachers on the practice of Montessori Method for teaching MRS according to bachelor degree of special education teachers

Dependent Variable	SCORE		N	X	F	p	Inter-Group Difference
	Bachelor Degree						
Opinions on Montessori Method	Department of Special Education		51	146,1176			
	Department of Elementary Education		58	150,7069	2,953	0,034	1-3
	Department of Child Development		36	154,6944			
	Other		29	147,1379			
Total				14			
			74	9,5920			

As can be seen from Table 4, opinions held by the teachers graduated from the

department of child development were more positive than the opinions of teachers graduated from the department of special education for using Montessori Method in teaching MRS. Any statistically significant difference was not observed between opinions held by the teachers graduated from the department of elementary education and other departments for using Montessori Method in teaching students with special educational needs.

When the average score of special education teachers about the practice of Montessori Method for teaching MRS was analyzed according to type of the special education institution they are working for, the difference between the scores of groups was statistically significant ( $F= 8.147, p<0.05$ ). Tukey's test was used in order to comprehend the origin of the difference. Results thereof are shown in Table 5.

**Table 5: Opinions of special education teachers on the Montessori Method according to type of the special education institution they are working for**

Dependent Variable	G	Institution	N	X	F	P	Inter-Group Difference
Opinions of special education teachers on the practice of Montessori Method for teaching MRS according to type of the special education institution they are working for	1	Mild special education classroom	36	148,2222	7,691	0,000	2-1 2-3 2-4 2-5 3-5
	2	Independent Special Education School	38	158,0263			
	3	Special Vocational School	13	138,0769			
	4	Moderate-Severe Special Education Classroom	23	142,7391			
	5	Rehabilitation Center	64	150,1563			
Total			174				

As can be seen from Table 5, opinions held by the teachers working for independent special education schools were more positive than the opinions of teachers working for special education classroom dedicated to students with mild mental retardation, moderate-severe special education classroom, special vocational school and rehabilitation center for using Montessori Method in teaching MRS. Furthermore, opinions held by the teachers working for special vocational school were more positive

than the opinions of teachers working for rehabilitation center for using Montessori Method in teaching MRS. There was not difference in the opinions of teachers working for special education classroom dedicated to students with mild mental retardation, moderate-severe special education classroom, special vocational school and rehabilitation center for using Montessori Method in teaching MRS.

Some of the opinions held by special education teachers on the use of Montessori Method in teaching MRS were acquired through open-ended questions. Collected data were analyzed through qualitative approach. Opinions of 163 special education teachers on the practicability of Montessori Method in Turkey for teaching MRS are shown in Table 6.

**Table 6: Opinions of Participants on the Practicability of Montessori Method in Turkey**

Practicability of Montessori Method in Turkey:					
Possible	F	%	Impossible	f	%
Considers that it will be effective	74	45,4	Deficient infrastructure	9	5,52
There should not be racial segregation	19	11,66	Not convenient for Turkey	7	4,29
Develops creativity	11	6,748	It should not be copied	2	1,23
Interest of children is same	6	3,681	No idea	27	16,6
It may replace rote learning	6	3,681	<b>Total</b>	45	27,6
Socio-cultural level is important	2	1,227			
<b>Total</b>	118	72,39			

As can be seen from Table 6, of 163 participants 118 (72.39%) thought that Montessori education could be used in Turkey. Of the participants holding this opinion, 74 (45.4%) indicated that Montessori education would be effective; 19 participants indicated that (11.6%) there should not be racial segregation; 11 participants (6.78%) stated that it would develop the creativity. Number of participants thinking that Montessori education could not be used in Turkey was 45 (27.6%). Of the participants holding this opinion 9 (5.52%) indicated that infrastructure was deficient; 7 participants (4%) indicated that it was not convenient for Turkey and 2 participants (1.1%) stated that it should be copied. Of the participants 27 (16.6%) stated that they did not have an idea about the practicability of Montessori Method in Turkey. Data about the opinions of special education teachers on students' walking freely around the classroom in the

Montessori Method are shown in Table 12.

**Table 7: Opinions of Participants on Students' Walking Freely Around the Classroom**

Students' Walking Freely Around the Classroom					
Approves	F	%	Disapproves	f	%
Enables learning by performing and experiencing	18	11	It results in	50	30,67
I approve it	17	10,4	indiscipline	13	7,975
Children should be controlled	12	7,36	I disapprove it	7	4,294
Children should pay attention to material which they are interested in	8	4,91	No idea	14	8,5
Authority should be established on the children	7	4,29	<b>Total</b>	84	51,53
Walking should not be aimless	7	4,29			
It enhances self-confidence	6	3,68			
It enhances curiosity	3	1,84			
They perform the activities more easily	1	0,61			
<b>Total</b>	79	48,5			

As can be seen from Table 7, of 163 participants 79 (48.5%) indicated that they approved students' walking freely around the classroom. Of the participants holding this opinion 18 (11%) indicated that students' walking freely around the classroom enabled learning by performing and experiencing; 17 participants (10.4%) indicated that they approved it; 12 participants (7.36%) stated that students might walk freely around the classroom but they should be controlled. Number of participants disapproving students' walking freely around the classroom was 84 (51.53%). Of the participants holding this opinion 50 (30.67%) indicated that it resulted in indiscipline; 7 participants (4.29%) indicated that they disapproved it; 13 participants (7.97%) stated that it would distract attention. 14 participants (8.5%) stated that they had no idea.

Data about the opinions of special education teachers on setting the students free for their choices in the Montessori Method are shown in Table 8.

**Table 8: Opinions of Participants on Setting the Students Free for Their Choices**

Setting the Students Free for Their Choices						
Approves			Disapproves		F	%
They should be set free	35	21,47	They can make erroneous choices		7	4,29
They should make choices according to their interests	28	17,17	I disapprove it		5	3,06
They are able to create original works	12	7,3	<b>Total</b>		29	17,79
It enhances self-confidence	12	7,36				
It enhances the sense of responsibility	10	6,13				
There are individual differences	9	5,52				
There should be specific limits	9	5,52				
It enhances the sense of independency	6	3,68				
Thinks that it will be effective	5	3,06				
They correct their own errors	4	2,453				
It results in a positive effect	2	1,23				
It enhances problem solving skills	1	0,61				
It may be possible for people of normal intelligence	1	0,61	<b>No idea</b>		17	10,42
Total	134	82,20				

As can be seen from Table 8, of 163 participants 134 (82.20%) approved setting the students free for their choices. Of the participants holding this opinion 35 (21.47%) indicated that students should be set free for their choices; 28 participants (17.17%) indicated that students should make choices according to their interests; 12 participants (7.36%) stated that they were able to create original works, it would enhance their self-confidence and they would assume responsibility. Number of participants disapproving setting the students free for their choices was 29 (17.79%). Of the participants holding this opinion 7 (4.29%) indicated that they could make erroneous choices; 5 participants (3.06%) indicated that they disapproved it and 17 participants (10.42%) stated that they had no idea. Data about the opinions of special education teachers on the presence of older and younger students in the same classroom in the Montessori Method are shown in Table 9.

**Table 9: Opinions of Participants on the Presence of Older and Younger Students in the Same Classroom**



Presence of Older and Younger Students in the Same Classroom					
Thinks that it is not convenient	f	%	Thinks that it will not cause problems		
			F	%	
It causes disorder	2		Learning will be permanent in this manner	19	11,65
There will be individual differences	2	13,50	They will be models for each other	14	8,58
Older students may cause problems for younger students	2		They support each other	12	7,361
Needs will be different	4	8,59	Approves	11	6,74
Necessary precautions should be taken	4	2,45	They get social	7	4,29
It is not convenient for special education	4	2,45	They learn about their own responsibilities	5	3,06
			It should be under control	5	3,0674
			It enhances self-confidence	1	85
					0,6134
					97
					57,668
			<b>Total</b>	94	71
	6	42,331			12,269
<b>Total</b>	9	29	<b>No idea</b>	20	94

As can be seen from Table 9, of 163 participants 69 (42.33%) stated that the presence of older and younger students in the same classroom might cause disciplinary problems. 22 participants (13.49%) indicated that it would cause disorder; 22 participants (13.49%) indicated that there would be individual differences and 14 participants (8.58%) stated that older students might cause problems for younger students. Number of participants approving the presence of older and younger students in the same classroom was 94 (57.66%). 19 participants (11.65%) indicated that learning would be permanent in this manner; 14 participants (8.58%) indicated that students would be models for each other; 12 participants (7.36%) stated that students would support each other. 20 participants (12.26%) indicated that they had no idea.

Data about the opinions of special education teachers on the idea that the Montessori Method may be effective on people of normal intelligence are shown in Table 10.

**Table 10: Opinions of Participants on Whether Montessori Method is Effective on People of Normal Intelligence**

It Is Effective on People of Normal Intelligence	It Is Effective on MRS
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<b>Approves</b>	<b>F</b>	<b>%</b>	<b>Approves</b>	<b>f</b>	<b>%</b>
It think that it will be effective	60	36,81	Approves	4	2,45
It will be more effective	29	17,79	It is solely for special education	3	1,84
Approves	10	6,13	<b>Total</b>	6	4,3
It should be individual-oriented	8	4,91			
It enhances creativity	7	4,29			
<b>Total</b>	114	69,94	<b>No idea</b>	42	25,76

As can be seen from Table 10, of 163 participants 114 (69.93%) indicated that they thought Montessori education to be effective for people of normal intelligence. 60 participants (36.80%) indicated that it would be effective; 29 participants (17.79%) indicated that it would be more effective; 10 participants (6.13%) stated that they approved it. Number of participants thinking that Montessori education would be effective for teaching MRS was 6 (4.3%). 4 participants (2.4%) indicated that it would be effective for teaching MRS; 3 participants (1.84%) stated that it was solely for special education. 42 (25.76%) special education teachers stated that they had no idea.

### **CONCLUSION AND RECOMMENDATIONS**

Special education teachers have moderate opinions about the use of Montessori Method in teaching MRS. Factors such as special education teachers' being trained about Montessori Method, being informed about Montessori Method, being employed in an educational institution having adopted Montessori Method and the duration of their service as special education teacher did not create any difference in the opinions of teachers on practicability of Montessori Method in teaching MRS. This indicates that special education teachers hold almost same ideas about the various aspects of Montessori Method. One of the interesting results of the research is that there is not difference in the opinions of teachers who are trained about Montessori Method or use Montessori Method and other teachers regarding the use of Montessori Method for teaching MRS. Findings obtained from qualitative data of the research indicate that special education teachers have similar opinions about the practicability of Method for teaching MRS even though they are not trained about Montessori Method or they have not worked for such an institution. It may be deduced that training about Montessori Method for special education teachers has not become effective on the opinions of special education teachers about the practicability of Montessori Method for teaching

MRS. In fact Montessori Method may widely be employed for teaching MRS. Erben (2005) states that Montessori materials are very effective for developing visual perception level out of recipient language development for mentally retarded children and hearing impairment. Korkmaz (2006) indicates that Montessori Method may effectively be used for teaching MRS. Before Montessori Method was adopted in our country, number of schools having adopted Montessori Method reached thousands (Brehony, 2000). Montessori Method is effective for developing senses of MRS (Erben, 2005) and also for mental education (Singh, 2005). Asher (2010) and Seldin (2000) points out that Montessori Method enabled the MRS to attain the same achievement with students of normal intelligence in exams held by Italian public schools. Given the above-mentioned developments, special education teachers' having insufficient knowledge about the use of Montessori Method for teaching MRS is worrisome in Turkey. Thus special education teachers should be trained about the use of Montessori Method for teaching MRS and their opinions thereof should be changed in a positive manner.

Female special education teachers think that Montessori Method may be used on a wider scale for teaching MRS. Skills of male special education teachers about the use of Montessori Method for teaching MRS should be developed and their opinions thereof should be changed in a positive manner.

Opinions held by the teachers graduated from the department of child development are more positive than the opinions of teachers graduated from the department of special education for using Montessori Method in teaching MRS. This results from the fact that Montessori Method is generally implemented in preschools and the Method is taught as a course in departments of preschool education/child development. There is not any difference between teachers graduated from the department of elementary education and other departments and special education teachers regarding their opinions thereof.

Opinions held by the teachers working for independent special education schools are more positive than the opinions of teachers working for special education classroom dedicated to students with mild mental retardation, moderate-severe special education classroom, special vocational school and rehabilitation center for using Montessori

Method in teaching MRS. Furthermore, opinions held by the teachers working for special vocational school are more positive than the opinions of teachers working for rehabilitation center for using Montessori Method in teaching MRS. There is not difference in the opinions of teachers working for special education classroom dedicated to students with mild mental retardation, moderate-severe special education classroom, special vocational school and rehabilitation center for using Montessori Method in teaching MRS. Why teachers working for independent special education schools and special vocational school have more positive opinions should be studied.

A great majority of the participants think that Montessori Method may be applied in Turkey for teaching MRS. Majority of the participants holding this opinion responded as follows: “It think that Montessori education will be effective for teaching MRS”. Participants stated that racial segregation should be avoided and the method will enhance the creativity of the children. Participants for whom the use of Montessori Method is impossible for Turkey indicate that infrastructure is deficient; it is not convenient for Turkey and it should be copied. Some of the participants do not have idea about the practicability of Montessori Method in Turkey.

A great majority of special education teachers approves students’ walking freely around the classroom. Participants holding this opinion indicate that students’ walking freely around will enable learning by performing and experiencing; they approve it; children may walk freely around the classroom but they should be controlled. Participants disapproving students’ walking freely around the classroom they point out that they disapprove since it may result in disciplinary problems and it will distract the attention of other children. Some of the participants do not have idea about the issue.

A great majority of special education teachers approves setting the students free for their choices. Special education teachers indicate that students should be set free for their choices; students should make choices according to their interests and thus they may create original works, their self-confidence will develop and they will assume responsibility. Participants disapproving setting the students free for their choices state that students can make erroneous choices and thus they disapprove it. Some of the participants do not have idea about the issue. A great majority of participants state that presence of older and younger students in the same classroom may result in disciplinary

problems. Some of the participants indicate that this event will cause disorder and some participants state that they may be individual differences and accordingly older students will cause problems for younger students. Participants approving the presence of older and younger students in the same classroom indicate that learning will be permanent in this manner; they will be models for each other and they will support each other. Some of the participants do not have idea about the issue. However children acquire the first social experiences in an environment where they can freely contact with friends of different ages and skills in the Montessori Method (Montessori, 1995: Oğuz & Köksal Akyol, 2006). Thus erroneous perception of the teachers thereof should be corrected.

A great majority of participants state that Montessori education may be effective for people of normal intelligence. According to literature, Montessori Method is a comprehensive practice including preschool education and other educational levels (Brehony, 2000; Korkmaz, 2006); Montessori Method is very effective for students of normal intelligence (Asher, 2010) and better achievements may be obtained with children of normal intelligence through Montessori Method (Tubaki and Matsuishi 2008; Asher, 2010; Seldin, 2002). Number of participants thinking that Montessori Method will be effective for teaching MRS is very few. This shows that special education teachers do not know that Montessori Method was primarily developed for special education. Thus special education teachers should be informed about the practices of Montessori Method for teaching mentally retarded students and courses about Montessori Method should be incorporated in academic departments of special education.

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