The Functionality of the Montessori Method: Preschool and Primary Greek School Teacher's Attitudes

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Abstract

In educational practice, the principal aim of the teacher is to enhance the all-round development of children and their active participation in the teaching and learning process. According to Montessori, children learn more effectively when they discover knowledge themselves, through self-exploratory learning and experiential approach to knowledge. In the context of the present small-scale research, the functionality of the Montessori Method in pre-school and primary school education was investigated through the distribution of a questionnaire to a sample of teachers in four prefectures of the country. More than half of the teachers are adequately acquainted with the basic principles of the teaching method, while only approximately 1/3 of them applies, to a great extent, methods related to the Montessori one. The majority of teachers considers, to a great extent, that the method is applicable in contemporary educational practice and constitutes a teaching innovation. Finally, they agree that the Montessori teaching method can enhance the students' learning process.

Keywords: Montessori; functionality; early years learning; pre and primary school teachers

1. Introduction

All-round and balanced development in childhood requires a holistic process, as multiple factors operate (cognitive, psychomotor, social, emotional) (Lasi et al., 2007). In the context of this holistic process, the acquisition of the language code, the mathematical code as well as basic multi-faceted social and emotional skills, require complex processes which need to be developed and cultivated from pre-school age (4-6 years old) (Franc & Subotic, 2015), in order to reinforce and ultimately conquer the process of learning. The following parameters are taken into consideration in this process: a) the capability and potential a man has for learning, b) the reinforcement of one's motivation to participate in the learning process, c) the contribution of insight and perceptual processes to the acquisition of learning (Fykaris, 2016). In order to optimize these data, it is necessary to construct the appropriate teaching framework in which the student will have the opportunity to consolidate learning by forming mental structures (Piaget, 2007, as cited in Katsiou-Zafrana, 2018).

The theoretical background of the "transformative" theory (Cole, 2011) can also contribute to the process above in order to create a basis for learning and developing students' mental psychic ability (Massou & Karadaki, 2017). In this context, the teacher is called to convert academic knowledge into school knowledge, which is then disseminated to students (Skourtou, 2010). In order to achieve the above, the following strategies and techniques have been put forward (James, 2001; Nagda et al., 2003, as cited in Mavroskoufis, 2013, p. 39):

The creation of learning expectations, aggregation of information or data, simulation, role playing, modeling, learning based on problem solving, use of proportions, metacognitive reflection and structure dialogue in small groups.

The factors above, in conjunction with the promotion of individual designs, the participation of activities in small or large groups, as well as the reflection upon activities, phenomena and facts are main pillars of Montessori education, on the basis of which, the child acquires knowledge through sensory interventions, through promoting autonomy and self-discipline as well as fostering cognitive, social and emotional skill development. In this teaching and learning environment, the principal aim of the teacher is to enhance the all-round development of children and their active participation in the teaching and learning process. In particular, Maria Montessori and Rudolf Steiner, representatives of holistic education, maintain that the main concern of the educator is to be fully aware of the children' life unfolding before them and their obligation to be "present" throughout this process (Miller, 2006). At the same time, Maria Montessori as well as Piaget, stated that: "the living organism and the mind constitute a structured whole" which undergoes "a constant succession in the structural development of the child's intellect" (Montessori, 1916/1965, as cited in Katsiou-Zafrana, 2018, p. 185). Moreover, Montessori pointed out that: "the intellect develops as a complex system of concepts in the child, actively structured by the child itself throughout a sequence of mental processes that represent an internal process, a mental development" (Montessori, 1916/1965, as cited in Katsiou-Zafrana, 2018, p. 186).

2. The Pedagogical Method of Maria Montessori

The Montessori pedagogical method was structured and implemented to children from poor families and mentally retarded children. Montessori was of the opinion that children learn more effectively when they discover knowledge themselves, through self-exploratory learning and experiential approach to knowledge. Montessori had confidence in the child and respect for his special abilities, inclinations and skills (Lopata et al., 2005). Additionally, the following are included in her pedagogical program: the cultivation of creativity, the development of imagination and inspiration, the gradual formation of critical consciousness and the collaboration among children, but also between children and adults.

The Montessori pedagogical method promotes creativity through freedom, while maintaining rules of discipline, self-directed and exploratory learning, collaborative thinking and action (Papanastasiou et al., 2017). The child becomes the focus and the setting serves as a field for observation and action with creativity, expression, communication and interaction to ensue (Papanastasiou et al., 2017). At the same time, the Montessori Method places particular emphasis on the overall and balanced development of the child. Respect for the child's development and the freedom to learn through his inner discipline are the foundations of the Montessori method, as a child can move freely, observe, discover and learn, while being in a calm psychological state and having self-control and self-awareness (Lopata et al., 2005).

For Montessori, creativity, as a cognitive process, can be taught to children through specific, appropriate instructions, with the teacher undertaking the role of the guide, the inspirer and the encourager, providing children with a variety of materials and stimuli, compatible with the mental and spiritual mental stage in which they are (Papanastasiou et al., 2017). Teaching takes place through the involvement of children in real-world data and through the use of environmental materials. In this way, play is not symbolic, but synonymous with real world engagement (Lillard, 2013). At the same time, the materials used are in line with the real world, as the new knowledge offered is related to the existing reality and it is grasped in an experiential and differentiated way (Papanastasiou et al., 2017).

The educational dimension contributed to the child being able to actively participate, at his own pace, while he is free to choose the activity he wants to engage in, the place and the duration of time, always within the predetermined ambit of the program. Consequently, the learning environment of the classroom encourages the development of activities with a specific meaning and content, so that children have the opportunity to engage in activities of their own choice.

3. The effectiveness of the Montessori Method

In order to investigate the effectiveness of the Montessori method in pre-school and school-age students, in private and public education, numerous relevant researches have been conducted worldwide. More specifically, a relevant study on the need to employ Montessorian supervisory material in teaching practice revealed that the contribution to solving attention difficulties in 5-6 year-old children is determinant. At the same time, in a similar extensive research study of Lillard (2005), it was found that the cognitive, academic and socio-emotional skills of children aged 3-6 years of the control group, attending schools where traditional teaching methods were implemented, were pourer than the corresponding students of the same age range of the experimental group attending Montessori schools. In terms of language and phonology, it has been observed that children attending Montessori pre-school education programs have a higher phonological awareness than their peers who attend traditional education programs (Franc & Subotic, 2015).

What is more, significantly fewer errors and an increase in concentration time were noted in the experimental groups who were taught by the Montessori method, compared to those in the controlled groups, not to mention that a broader development of their cognitive and psychomotor skills was also noted (Ansari & Winsler, 2014; Byun et al., 2013; Pate et al., 2014). Additionally, in a research on the effectiveness of the Montessori Method, it was found that students who were taught maths by the Montessori Method, manifest higher performance, highly developed critical thinking, problem-solving skills, but also easier adaptability in class, compared to peers who are taught by traditional techniques (Faryadi, 2017). In the same context, remarkable differences in the mathematical performances also arose from the research results of Dohrmann et al. (2007), Manner (2006) and Lillard (2012).

Regarding the social and the emotional level, pertinent researches reveal that the child involved in a Montessori educational process has a more positive image of himself (Glenn, 2003, cited in Papanastasiou et al., 2017, p. 1005). Furthermore, through the Montessori educational method, children are encouraged to take decisions freely, make choices and self-act, resulting in their skills being gradually enhanced with an emphasis laid on self-esteem, self-awareness and social skills (Murray, 2008; Ozerem & Kavaz, 2013; Shivakumara et al., 2016). In this teaching and learning context, students and educators become collaborators, who jointly investigate and think, aiming at accomplishing the teaching goals. In a tandem research of Lillard (2012), it was found that students of Montessori schools and educational programs exhibited developed strategies and solving social problems.

The effectiveness of the method for accomplishing cognitive as well as social and emotional goals is demonstrated by the views of parents of children studying in Montessori educational environments internationally (Kayli & Ari, 2011; Ozerem & Kavaz, 2013; Tympa, Karavida, Charissi, & Siaviki, 2020). In particular, in the Greek educational system, parents claim that their children have more confidence in their abilities, especially in mathematics, and they are capable of helping their elder siblings who have received a similar form of education. Regarding their linguistic performance, they use complex vocabulary in their oral speech when describing daily activities outside the school environment, while they are capable of studying on their own. At a social and emotional level, they are more sociable, capable of solving problems, they have increased self- confidence and seem to be more mature in justifying events and situations at school (Tympa, Karavida, Charissi, & Siaviki, 2020).

With regard to the general investigation of the didactic effects of the Montessori method in the Greek educational system, on children's cognitive development from pre-school to primary school, a questionnaire was created, applying to teachers of children aged 3.5-6 years, which explores individual parameters related to their teaching practices and approaches, while capturing their views on the general functionality and effectiveness of the Montessori method in educational practice. However, prior to the official distribution of the questionnaire, and in order to ensure its validity, reliability and objectivity, a small-scale survey was conducted on a limited number of pre-school and elementary school teachers in the prefectures of Attica, Thessaloniki, Etoloakarnania and Crete. The stages of this small-scale survey, along with the derived results and conclusions are discussed in detail in the next section.

4. Research Methodology

4.1 Aim of the study and research questions

The principal aim of the research is to investigate the extent to which the Montessori method can be implemented in pre-school and elementary school education by teachers of 3.5-6 year-old students. A relevant questionnaire was created for this research, which was divided into 4 categories and a total of 29 closed-ended questions. The questionnaire was transferred to Google Docs (online survey) electronic platform and was sent to a sample of teachers in the prefectures of Attica, Thessaloniki, Etoloakarnania and Crete. The sample of teachers belongs to the direct working environment of the researcher (convenience sampling). The questionnaire includes an introductory note informing the participants and ensuring their anonymity and privacy, as well as an outline of the survey objectives. More specifically, the survey questions are summarized as follows:

- Are teachers aware of the basic principles of the Montessori Method?
- Have they received some specific training on the method?
- Do they implement individual principles, on which the Montessori Method is structured, in the classroom?
- Do they agree that the Montessori teaching method can reinforce the student's learning progress?
- Do they agree on a potential implementation of training programs based on the Montessori Method in Greek schools?

4.2 Survey sample

The sampling process for this survey is a non-random sampling, more specifically convenience sampling, as the sample of teachers participating belongs to the direct working environment of the researcher. The questionnaire was sent in electronic form to 47 teachers (convenience sampling) and was completed by all of them in the prefectures of Attica, Thessaloniki, Etoloakarnania and Crete (n = 47.5 men and 42 women). Out of a total of 47 participants, 14 of them served in primary schools, 14 in kindergartens and 20 in pre-school centers / nursery schools. The pilot survey was conducted in the two months from August to September 2020 in a sample of teachers in four prefectures, Attica, Thessaloniki, Etoloakarnania and Crete. The detailed demographics of the participants are outlined in Table 1.

Table 1. Descriptive statistics of participant demographics (frequencies & percentages).

Demographics/P	Pre-school Education	Kindergarten	Primary School
rofile	Center/Nursery School	n=13	n=14
N=47	n=20		
Age			
20-30	1 (5%)	1 (7.7%)	3 (21.4%)
31-40	13 (65%)	10 (77%)	9 (64.3%)
41-50	2 (10%)	1 (7.7%)	1 (7.1%)
>50	4 (20%)	1 (7.7%)	1 (7.1%)
Years of service			
in education			
1-10	8 (40%)	5 (3.8%)	8 (57.1%)
11-20	5 (25%)	6 (4.6%)	5 (35.7%)
21-30	6 (30%)	2 (1.5%)	1 (7.1%)
>30	1 (5%)	0 (0%)	0 (0%)
Employment status			
Status			
Permanent	13 (65%)	5 (3.8%)	5 (35.7%)
Substitute	0 (0%)	7 (5.4%)	8 (57.1%)
Contract	7 (35%)	1 (7.7%)	1 (7.1%)
Men/Women	2 (10%)/18 (90%)	0 (0%)/13(100%)	3 (21.4%)/11 (78.6%)

4.3 Data collection

The questionnaire was distributed to a sample of 47 teachers, in four prefectures of the country, who served in both private and public pre-school and primary school education. This questionnaire was attempted to be adapted to the specialized teaching framework in which the teachers apply the method. The questionnaires were sent back, completed by all 47 teachers, without any difficulties, shortcomings or ambiguities pointed out by the respondents during their completion.

The questionnaire comprises a total of four parts. More specifically, Part A is structured on the basis of seven closed-ended questions, accompanied by predefined options in order to gather basic information related to the profile and the demographic characteristics of the participants (sex, age, years of service in total, employment status, operating type/status of employment organization, further studies besides the bachelor degree).

Part B consists of six questions and aims at teachers assessing themselves the extent to which they comprehend and approach the Montessori teaching method in teaching practice. The first three questions explore the existence of more specific training in the teaching method, the degree of implementation in the daily teaching practice of relevant teaching approaches, as well as the familiarity of the participants with the basic principles of the method respectively.

Through the next three questions, the comprehensibility of the teaching method is assessed, the extent to which teachers consider the method applicable in contemporary educational practice, while the method as a teaching innovation is evaluated.

Part C, subsequently, consists of 14 closed-ended questions, the answers for which the Likert scale is used (Joshi et al., 2015). All the questions aim at assessing the extent to which specific didactic-methodological principles related to the Montessori teaching method have been employed. The first questions in succession regard the composition of working groups within the classroom, the existence of a certain number of group activities, the potential for every student to work at his own personal pace, as well as the special design of the classroom environment in general. At the same time, the way the monitoring tools are used in the school class, the role of the teacher in the teaching process and the level of emotional stress of the students are evaluated.

In the last part of the questionnaire, the degree of the overall assessment of the teaching method is estimated, based on the relevant answers of the teachers to two questions. More specifically, in the first question, it is investigated whether the method could enhance the learning progress of a child and, in the second one, the level of agreement of the participants on a potential implementation of formal educational programs, based on the Montessori Method in the Greek educational system in the near future. There is a special free expression box at the end of the questionnaire, so that each respondent can note down anything relevant to the survey he wishes.

4.4 Collection and processing of data

After the creation and transfer of the questionnaire on the web application form Google Docs, it was then sent to 47 teachers for pilot run and completion in the prefectures of Attica, Thessaloniki, Etoloakarnania and Crete, who served in both private and public pre-school and elementary school education. After the successful collection of all 47 questionnaires that had been sent, the answers were then checked for errors, omissions in the responses or/and the existence of specific questions that had not been answered and would affect the validity of the results of the analysis. The enumeration of the questionnaires followed, in ascending order, based on the data of their completion and their classification in accordance with the type of the educational institutions of the participants (Pre-school education center/Nursery school- Kindergarten-Elementary school).

All data and responses were then entered into an excel spreadsheet in order to be processed. Before entering the data in a spreadsheet, the variables and the way of assessment for each one of them were determined, in relation to the purpose, the specific objectives, but also the survey questions that had been formulated before the pilot survey was conducted. In addition, after the completion of the data entry procedure in the spreadsheet, two checks were performed to exclude the possibility of involuntary omitting a data entry in the program, incorrect answer or value in a specific variable, which could significantly differentiate the results delivered and lead to incorrect conclusions. The next stage, after the successful completion of the checks, was to create pertinent numeric tables as well as corresponding graphs for the investigation of specific objectives, the survey questions and the final inference.

4.5 Validity, credibility and objectivity of the study

In order to ensure the coherence and consistency of the questionnaire, particular emphasis was placed on the correct use and clarification of terms, concepts, as well as on the wording of the questions in a clear and direct way. In parallel, each questionnaire was accompanied by an introductory letter of recommendation in which the researcher's personal details were clearly and fully written out. There was then reference made to the aim and the specific objectives of the survey, the necessity that imposes it, its contribution to the field of educational research, as well as the subjects themselves in this endeavor, the types of questions posed in the questionnaire with concurrent reference to the way to be answered, but also to the reinsurance that the data collected by all participants will remain anonymous and the survey results will be used exclusively for research purposes. The reliability of the research was attempted to be ensured through the use, in the largest number of the questions, of the five-point Likert scale, both for the investigation of the extent of comprehension and approach of the Montessori Method by the participants and for the evaluation of the level of assessment of specific didactic and methodological principles and practices in teaching. At the same time, an attempt to send the questionnaire to teachers who live in other, more densely populated prefectures of our country and work in similar positions both in pre-school and primary school education was made.

4.6 Ethical Issues

Prior to the conduct of the survey, the conscious and unimpeded consent of the participants was ensured, without any form of pressure or coercion applied.

The wording of the questions, as well as the general structure of the questionnaire itself, were thoroughly checked, in order not to offend the participants and not to provide further personal information, which could lead to the removal of their anonymity. At the same time, all the subjects of the sample had been informed of their right to withdraw at any time and for any reason, as well as of their right not to answer the questions they did not wish to answer.

The main limitations of the survey include the fact that it was conducted in 4 prefectures out of a total of 51 in our country and the sample of participants derived from the direct work environment of the researcher (convenience sampling).

5. Results

5.1 Part A (Profile – Demographics)

As depicted in Table 1, the majority of participants belong to the age group of 31-40 years, while almost half of them have been teaching for a total of 20 years. At the same time, the majority of them are in permanent positions, 1/3 work as substitute teachers and 1/5 work on a contract. A considerable number of participants hold a master's degree, whilst about 1/3 have not had further studies besides the bachelor degree. Pertinent descriptive statistics of further studies besides the basic degree are found in Table 2.

Table 2. Descriptive statistics of further studies other than a bachelor's degree.

Second Degree	11 (23.9%)		
Master's Degree	21 (45.7%)		
PhD	4 (8.7%)		
Educational Further Training	3 (6.5%)		
Simulation	2 (4.3%)		
None of the above	16 (34.8%)		
Educare seminars	1 (2.2%)		

5.2 Part B (Level of Understanding and Approach to the Montessori Method)

Most of the participants claimed that they had not received any special training of the Montessori teaching method. Half of the percentage of respondents (approximately ¼), who have received some special training, apply teaching approaches of the method to a large extent, while 1/3 of them to some extent. More than half of the respondents are well aware of the basic principles of the teaching method, while the rest of them have little or no knowledge of its basic principles. However, only 1/3 of them employ approaches related to the Montessori Method in their daily teaching practice to a large extent, while more than half of them apply similar approaches to a small or a very small degree. Only the teachers who stated that they were well aware of the basic principles of the method claimed that they implement similar teaching approaches to the same extent. At the same time, the vast majority of the participants consider the method to be implemented to contemporary educational practice to a high and very high degree, as opposed to 1/3 of them who claim that the method can be implemented to a small and very small degree. Finally, the majority of the teachers of the sample group perceive the Montessori Method as a didactic innovation to a high and very high degree (Table 3).

Table 3. Descriptive statistics of knowledge and implementation of the method in teaching practice.

	Implementation of didactic approaches related to the Montessori Method					
Training in the Montessori Method	Not at all	Little	Neutral	Very	Very Much	
N=47	n=2	n=9	n=17	n=18	n=1	
Yes (n=12/25.5%)	0 (0%)	1 (8.3%)	4 (33.3%)	6 (50%)	1 (8.3%)	
No (n=35/74.5%)	2 (5.7%)	8 (22.9%)	13 (37.1%)	12 (34.3%)	0 (0%)	
Knowledge of basic Principles of the Montessori Method						
Not at all	0 (0%)	0 (0%)	0 (0%)	0(0%)	0(0%)	
Little	2 (100%)	3 (33.3%)	0 (0%)	0 (0%)	0 (0%)	
Neutral	0 (0%)	4 (44.4%)	10 (58.8%)	0 (0%)	0 (0%)	
Very	0 (0%)	2 (22.2%)	7 (41.2%)	18 (100%)	0 (0%)	
Very Much	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (100%)	

5.3 Part C (Level of Employment of Didactic-Methodological principals)

Regarding the employment of more specific principles of the method, almost half of the participants in the survey stated that the working groups at classroom level comprise of a different learning level to a large extent, whilst about

1/3 stated that working groups in the classroom consist of students of a different learning level to a minor or a very limited extent. In addition, slightly fewer than half of the participants pointed out that group activities are often carried out in the classroom (at least 1 daily), while every student is encouraged to work at his/her own pace to a large and very large degree for the vast majority of teachers in the sample. More than 2/3 of the teachers pointed out that the teaching process at a school level is prefabricated to a large and very large extent, with a smaller percentage of teachers (close to 1/5) supporting the above to a minor extent. In the following question, the majority of participants claimed that they shape the classroom environment in accordance with the special needs of the students to a large and very large extent. At the same time, they initiate students to educational environments, allowing them to move freely, to a large and very large extent. Regarding the use of monitoring tools, it is pointed out, by the majority of the respondents, that their placement on the site is based on specific learning objectives to a large and very large extent, while only one correct didactic way of using them is promoted during their use to a large extent just for 1/5 of respondents. The teaching process involves distinct phases to a large extent for the vast majority of participants. As far as the pedagogical relationship between teacher and students is concerned, it is characterized by a positive reinforcement to almost all respondents, while the proportion of those who stated that they employ teaching approaches to develop students' skills was equally high. Finally, students in teaching practice to be often under emotional stress to a large degree is a response given by only 1/5 of the participants, to a small degree by 1/4, to a very small degree by 1/3 and not at all by equal percentage. Most of the percentages above per individual question are listed in the following Table (Table 4).

Table 4. Descriptive statistics of employing didactic- methodological principles of the Montessori Method in classrooms.

Implementation of didactic principles of the Montessori Method N=47	Not at all	Little	Neutral	Very	Very Much
Composition of working groups with students of different learning levels	3 (6.4%)	3 (6.4%)	11 (23.4%)	26 (55.3%)	4 (8.5%)
Encouraging every student to work at his own pace	0 (0%)	0 (0%)	7 (14.9%)	31 (66%)	9 (19.1%)
Predesigned teaching process	0 (0%)	2 (4.3%)	10 (21.3%)	22 (46.8%)	13 (27.7%)
Shaping the learning environment based on the special needs of students	0 (0%)	2 (4.3%)	2 (4.3%)	30 (63.8%)	11 (23.4%)
Free movement of students in educational environments	0 (0%)	4 (8.5%)	2 (4.3%)	34 (72.3%)	7 (14.9%)
Specific didactic phases in educational process	1 (2.1%)	3 (6.4%)	7 (14.9%)	35 (74.5%)	1 (2.1%)
Positive reinforcement in student-teacher relationship	0 (0%)	0 (0%)	2 (4.3%)	21 (44.7%)	24 (51%)
Emotional stress of students in teaching practice	14 (29.8%)	15 (31.9%)	12 (25.5%)	6 (12.8%)	0 (0%)

5.4 Part D (Level of Satisfaction/ Evaluation of the Method)

In the fourth and last Part of the questionnaire, the satisfaction level of teachers is assessed with regard to the effectiveness, the necessity and the functionality of the method in educational practice. Teachers, to a large (65.2%) and very large extent (26.1%), agree with the view that the Montessori teaching method can reinforce the learning progress of the student, while they also agree, to a large (65.2%) and very large extent (21.7%), on a potential implementation of educational programs based on the Montessori Method in Greek schools.

6. Discussion

According to the above findings of the pilot survey, it is established that the vast majority of participants were women. All teachers of the sample work, in almost similar percentages, in Primary schools, Kindergartens and Pre-school Education/Nursery Schools. The majority of them belongs to the age range 31-40 years, while almost half of them have a total of 20 years of work experience in education.

At the same time, approximately half of them work as teachers in permanent positions and hold a Master's degree. Out of all participants, only one in four has some form of special training in the Montessori method, unlike international surveys, in which there is an extremely large number of trained teachers in primary education (Atli et al., 2016; Christensen, 2016; Duckworth, 2006).

More than half of the participants have adequate knowledge of the basic principles of the teaching method, while only about 1/3 of the teachers apply to a large extent approaches related to the Montessori method in their daily teaching practice, although the majority of them believe that the method can be applicable in modern educational practice to a large extent. In their opinion, the Montessori Method is a didactic innovation to a large and very large extent, a finding that can be detected in similar international researches (Atli et al., 2016; Duckworth, 2006; Malm, 2004).

In terms of exploring the adoption and implementation of specific, individual teaching principles and practices related to this teaching method in the classroom, almost half of the participants stated that working groups at classroom level are made up to a large extent of students of different learning levels, as such is the case in the corresponding researches of Atli et al. (2016, p. 128) and Duckworth (2006, p. 44). In addition, participants of a similar percentage claimed that group activities are often carried out in their class, while every single student is encouraged to work at his own pace for the vast majority of them. Research findings of Atli et al. (2016, pp. 131-132), Duckworth (2006, pp. 51-52) and Malm (2004, pp. 403-404) are also similar. Respectively, almost all respondents pointed out that the teaching process is prefabricated to a considerable extent, while the broader learning environment, at classroom level, is shaped on the basis of the special needs of students. This special classroom design has been observed in Montessori educational environments worldwide (Atli et al., 2016; Christensen, 2016; Duckworth 2006; Malm, 2004).

Furthermore, teachers initiate students into educational environments, allowing for their free movement in those, and place the available monitoring tools on site in accordance with specific learning objectives, in correspondence with the researches of Duckworth (2006), Malm (2004), Murray (2008), Ozerem & Kavaz (2013) and Shivakumara et al. (2016). However, only one correct way of using them is promoted for just 1/5 of the teachers, with the teaching process to include distinct phases for the majority of participants. In line with the research of Christensen (2016, pp. 45-46), Duckworth (2006, pp. 43-44) and Malm (2004, p. 402), the pedagogical relationship between teacher and student is characterized by a positive reinforcement, while teaching approaches in order to develop students' skilled are employed in teaching practice. For the vast majority of the sample teachers, students being under emotional stress in class are not a common phenomenon.

Finally, the majority of participants agree that the Montessori Method can enhance the learning progress of a student, as does a considerable number of researches worldwide (Atli et al., 2016; Ozerem & Kavaz, 2013; Shivakumara et al., 2016), as they also agree on a potential implementation of educational programs based on the Montessori method in Greek schools.

7. Conclusion

Based on the above findings of the study, it is clear that preschool and primary school teachers consider the Montessori Method as an applicable Methodin modern educational practice. They also stated that the Montessori Method is a didactic innovation, capable of enhancing the teaching and learning process. As a result, they strongly agree to a potential future implementation of educational programs based on the Montessori Method in Greek schools. In this framework, further research on the effectiveness of the Method as well as the specific conditions under which it can be implemented is considered crucial. Moreover, a similar research could be conducted in a larger group of teachers from preschool and primary school educational settings. Their opinions, ideas, education, experience, expertise and willingness for improvement could contribute significantly to the successful implementation of the Montessori Method in the Greek public educational system.

8. References

- Ansari, A., & Winsler, A. (2014). Montessori public school pre-K programs and the school readiness of low-income Black and Latino children. *Journal of Educational Psychology*, *106* (4), 1066–1079. Doi: 10.1037/A0036799
- Atli, S., Korkmaz, M., Tastepe, T., & Koksal Aksoy, A. (2016). Views on Montessori approach by teachers serving at schools applying the Montessori Approach. *Eurasian Journal of Educational Research*, 66, 123-138. Doi: http://dx.doi.org/10.14689/ejer.2016.66.7
- Byun, W., Blair, S., N., & Pate, R., R. (2013). Objectively measured sedentary behavior in preschool children: Comparison between Montessori and traditional preschools. *International Journal of Behavioral Nutrition and Physical Activity*, 10 (2), 1–7. Doi: 10.1186/1479-5868-10-2

- Christensen, O. (2016). Proving Montessori: Identity and Dilemmas in a Montessori Teacher's Lived Experience. *Journal of Montessori Research*, 2 (2), 35-48. Doi: 10.17161/jomr.v2i2.5067
- Cole, S. (2011). Situating children in the discourse of spirituality. *N. Wane et al, Spirituality, Education & Society,* 1-14. Rotterdam, The Netherlands: Sense Publishers.
- Duckworth, C. (2006). Teaching peace: a dialogue on the Montessori method. *Journal of Peace Education*, 3 (1), 39-53. Doi: 10.1080/17400200500532128
- Dohrmann, K., R., Nishida, T., K., Gartner, A., Lipsky, D., K., & Grimm, K. J. (2007). High school outcomes for students in a public Montessori program. *Journal of Research in Childhood Education*, 22 (2), 205-217. Doi: 10.1080/02568540709594622
- Faryadi, Q. (2017). The Application of Montessori Method in Learning Mathematics: An Experimental Research. *Open Access Library Journal*, 4, 1-14. Doi: https://doi.org/10.4236/oalib.1104140
- Franc, V., & Subotic, S. (2015). Differences in phonological awareness of five-year-olds from Montessori and regular program preschool institutions. *The Faculty of Teacher Education University of Zagreb Conference*, 12-20.
- Fykaris, I. (2016). The applied dynamics of learning theories in the teaching process. *Scientific Yearbook of the Department of Early Childhood Education of the University of Ioannina*, 9 (2), 99-128.
- James, C. (2001). Dialogue and Resistance in the Classroom. CORE, York University's Newsletter on University Teaching, 11 (1), 3-5.
- Joshi, A., Kale, S., Chandel, S., & Pal, D. K. (2015). Likert Scale: Explored and Explained. *Current Journal of Applied Science and Technology*, 7 (4), 396-403. Doi: https://doi.org/10.9734/BJAST/2015/14975
- Katsiou-Zafrana, M. (2018). Brain and Education. Thessaloniki: Kyriakides Publications.
- Kayili, G., & Ari, R. (2011). Examination of the Effects of the Montessori Method on Preschool Children's Readiness to Primary Education. *Educational Sciences: Theory and Practice*, 11 (4), 2104-2109.
- Lasi, S., Nadeem, S., & Fatima, I. (2007). Quality in early childhood education: Assessing early child development a holistic approach for ages 3-6 years. *Quality in education: Teaching and leadership in challenging times*, 295-305.
- Lillard, A. (2005). Montessori: The science behind the genius. New York: Oxford University Press.
- Lillard, A. (2012). Preschool children's development in classic Montessori, supplemented Montessori, and conventional programs. *Journal of school psychology*, *50* (3), 379-401.

 Doi: https://doi.org/10.1016/j.jsp.2012.01.001
- Lillard, A. (2013). Playful Learning and Montessori Education. American Journal of Play, 5 (2), 157-186.
- Lopata, C., Wallace, N., & Finn, K. (2005). Comparison of Academic Achievement Between Montessori and Traditional Education Programs. *Journal of Research in Childhood Education*, 20 (1),5-13.Doi: 10.1080/02568540509594546
- Malm, B. (2004). Constructing professional identities: Montessori teachers' voices and visions. *Scandinavian Journal of Educational Research*. 48 (4), 397-412. Doi: 10.1080/0031383042000245799
- Massou, M., & Karadaki, Th. (2017). Aiming at the comprehensive development of the student: Spirituality and its dimensions. *Pedagogical Inspection*, 64, 82-97.
- Mavroskoufis, D. (2013). Teaching and Transformative Learning in universities. *Pedagogical Inspection*, 55, 35-53.
- Miller, R. (2006). Reflecting on spirituality in education. *Encounter*, v. 19 (2).
- Murray A., K. (2008). Public perceptions of Montessori education. New York: ProQuest.
- Nagda, B., Guren, P., & Lopez, G. (2003). Transformative Pedagogy for Democracy and Social Justice. *Race Ethnicity and Education*, 6 (2), 165-191. Doi: 10.1080/13613320308199
- Ozerem, A., & Kavaz, R. (2013). Montessori approach in pre-school education and its effects. *The Online Journal New Horizons in Education*, 3 (3), 12-25.
- Papanastasiou, D., Anagnostopoulou, B., & Parousi, A. S. (2017). Promoting students' creativity through three pedagogical methods: Montessori, Waldorf, Reggio Emilia. *Proceedings of the Hellenic Conference of Educational Sciences*, (1), 1002-1022. Doi: http://dx.doi.org/10.12681/edusc.1703
- Pate, R., R., O'Neill, J., R., Byun, W., McLver, K., L., Dowda, M., & Brown, W., H. (2014). Physical activity in preschool children: Comparison between Montessori and traditional preschools. *Journal of School Health*, 84 (11), 716–721. Doi: 10.1111/josh.12207
- Shivakumara, K., Dhiksha J., & Nagaraj, O. (2016). Efficacy of Montessori and traditional method of education on self-concept development of children. *International Journal of Educational Policy Research and Review*, *3* (2), 29-35.Doi: http://dx.doi.org/10.15739/IJEPRR.16.00
- Skourtou, E. (2010). Transformation: a central issue in learning and teaching. *Pedagogical Currents in the Aegean*, 2011/5, 98-99.

Tympa, E., Karavida, V., Charissi, A., & Siaviki, A. (2020). Parental Views of the Montessori Approach in a Public Greek Early Years Setting. *International Journal of Primary, Elementary and Early Years Education*, 48 (9). Doi: https://doi.org/10.1080/03004279.2020.1849344