



FREEDOM AND AUTONOMY IN MONTESSORI PEDAGOGY: IMPLICATIONS FOR EDUCATOR TRAINING AND LEARNING ENVIRONMENT DESIGN

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Abstract: This article explores the pedagogical and ethical foundations of the Montessori method, emphasizing the interplay between child autonomy, educator's inner formation, and the prepared learning environment. Through a historical-philosophical and interdisciplinary analysis, the study highlights the principle of "freedom within limits" as central to Montessori's conception of child-centered education. Special attention is given to the moral and spiritual preparation of the educator, regarded as essential for fostering self-directed learning and intrinsic motivation. The article also examines the challenges of integrating Montessori principles within traditional educational systems and adapting them to the digital era. The findings reaffirm the continuing relevance of Montessori pedagogy for rethinking educator training, ethical responsibility, and didactic design in early childhood education.

Key words: child autonomy, prepared environment, moral development, early childhood education, freedom within limits

1. Introduction

The interest in the analysis from multiple perspectives of education and implicitly of the approaches to ensure the success of the didactic process meant long analyses and reflections based on different philosophical and anthropological bases (Opriș, 2024a). Each new stream of thought as well as any of the significant religious systems looked at the formation of new generations from specific positions. Each educational philosophy tries to describe and cover conceptually and praxiologically certain goals and instructive-educational approaches starting from one's own understanding of man and from the possibilities that defining educational courts – the family, the community and the school institution, in the different stages of its development – have in order to achieve some common desiderata (Pânișoară & Manolescu, 2019).

Montessori pedagogy, was initiated in the first part of the twentieth century by the famous author born near Ancona, in Italy, with impressive studies for her time, all the more so as they were reserved for men, first in the technical field, then with a degree in Physics, Mathematics and Natural Sciences, and later in medicine, with specialization in general medicine and psychiatry. It was born as a result of the author's work with a series of children with certain deficiencies, for which the illustrious later teacher also identified errors in plotting, respectively in driving on educational trajectories too little adapted to their particular situation and needs (Seldin, 2016).

Starting from her pedagogical experiences, Maria Montessori capitalized in the context of Italian, then European, and later world society marked by the First World War, but especially by the Second one, the classic concepts regarding negative education, of J.J. Rousseau and the basic idea of Fr. Froebel on the role of educators in organizing and leading preschool education through play, managing to propose a middle ground, in which total nondirectivism and rigid directivism are rejected. The author thus builds what can be called the pedagogy model of freedom within certain limits or education through indirect guidance (Opriș, 2012).

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Montessori considers essential for the success of the education aspects such as: the preparation by the educator of the environment in which the child can learn through the free choice of activities to which he is attracted or interested at a given time, the adult's ability to observe attentively and competently, but also to intervene only when needed in the child's activity, the support through activities, by specific materials and by environmental rules of a pedagogy of freedom that avoids both chaos and excessive coercion, the assumption by educators of moral norms able to create the conditions for the realization of educational activities in the matrix described by this pedagogy (Momanu, 2016).

2. Research design Results

The literature review shows that there is much research on the effects of Montessori education on developmental and learning dimensions in preschool and young school-age children (Demangeon et al., 2023; Lillard, 2012). In this context, the present analysis aimed to highlight the main elements of psycho-pedagogical structure at the foundation of the essential concepts of Montessori pedagogy, but also to contribute to a better understanding of the role and place of moral values within this educational model validated by over one hundred years of activity worldwide, included in Romania, among educational alternatives, which inspires more and more theorists and practitioners (Negreanu, 2002). The study also aims to answer the question of the possibilities of adapting the montessorian principle of freedom in the contemporary digital environment.

The article is based on a theoretical research that is part of a larger investigative approach aimed at identifying the key elements of Montessori pedagogy that can be used in traditional kindergartens, in order to significantly support the increase in the quality of the teaching process in these educational institutions. The research methodology is qualitative, benefiting from documentary-analytical analyses based on bibliographic research of classical and contemporary sources, as well as the correlation of the analyzed theory with empirical research data from recent articles. The approach was not about testing hypotheses, but about supporting a synthetic and critical perspective on the foundations and current relevance of Montessori pedagogy. The content analyses combined the conceptual reflection specific to pedagogy with perspectives offered by neuroscience and educational psychology, in order to add value to the research, from an interdisciplinary perspective.

3. Results

3. 1. "Help me do it myself!" - the meanings of freedom in the act of learning

In Montessori pedagogy, the educator is viewed from a certain distinct perspective, which assigns him different roles from traditional teaching. In his first steps in formal education, the educator supports the child to become familiar with the objects around him, guiding him in their use, and through this process, he practically introduces him to the environment prepared especially for him (Albulescu, 2014). Subsequently, it gives him opportunities and contexts to capitalize on his freedom of choice of activities and to carry them out independently (Cazan & Petrescu, 2017). Maria Montessori also uses the term leader for the educator, because she considers that in the kindergarten in which her educational paradigm is capitalized the child educates himself, and the teacher has the responsibility to observe and accompany the children in the educational environment. In this sense, the author states: "with my methods the educator teaches little, observes a lot and, above all, has the function of leading the psychic activities of children and their physical development. Therefore, I changed the name of educator to that of leader" (Montessori, 1977, p. 125).

Maria Montessori believes that a child shows us how he needs to be treated and reveals all his splendor to us. Emphasizing the fundamental role that the adult has in the life of the child, the author shows that "in carrying out his work of dedication to the child, the adult must first of all understand that he has to do with a revelation of the infantile soul" (Montessori, 2016, p. 86). For the pedagogue-doctor, the educator is most deeply involved when she builds for the child an adapted, personalized and individualized environment and when she understands the new attitude towards it. She openly states that "we must create around the child an environment that responds, not only from a hygienic point of view, but above all, from a spiritual point of view, to his demands" (Montessori, 2016, p. 86).

The primary task for educators is to organize, build and arrange the educational environment in kindergarten, because, as Montessori says (2015, p. 38), "even in the careful preparation of the child's environment, we have an important task because it is about creating a whole new environment: the world of childhood".

The whole Montessori pedagogy starts from the words of a child "Help me do it myself!". Taking with great responsibility this expression, Maria Montessori takes over and further popularizes the concept of freedom in the child and emphasizes the essential role that the adult has in the formation of the child. Mainly, in consonance with nondirectivist pedagogies, the great Italian pedagogue warns that "the adult must not intervene, he must not act in the place of the child" continuing with the exhortation: "give him the necessary means and let him act: his freedom lies in this. I urge every teacher and every parent, not to instruction, but to humility and simplicity in dealing with young children" (Montessori, 2022, p. 20).

Educators are called upon, in this context, to closely follow each child in order to provide the necessary support in each sensitive period and at the same time to respond appropriately to their individual developmental needs. In kindergarten, the role of the "montessori" teacher is not to teach in the traditional sense, but to create learning contexts, guiding the child in choosing the right materials and in discovering the most effective ways to use them (Felea, 2003). After long observations and experiments, Maria Montessori comes to the conclusion that all children naturally learn through activity, and their character is formed through freedom. However, these general principles need to be put into practice, which is why specific materials have been created to meet these needs. These concepts are in contrast to the traditional idea that a child should stand still while being taught the lesson, and each of his movements must be strictly supervised by a teacher. They also have nothing in common with schools where adults do everything instead of children: wash their faces, dress them, clean up after them, rigidly set the time of rest and organize educational activities and games according to a fixed schedule (Montessori, 2022).

As the author notes, "in Montessori kindergartens, it is the children who do these things for themselves. They are not taught by an educator in the usual sense of the word, because the educator is there rather as an observer and helper. This model shows the child how to use the materials, how to wash himself, but it is the child who manipulates the material, perfects himself through practice and keeps his face clean because he wants it himself" (Montessori, 2022, pp. 21-23). At the same time, in Montessori kindergartens, the child learns directly from the interaction with the environment that surrounds him because the role of the educator is only to facilitate this connection, guiding the child and demonstrating to him how to use different materials. The beautifully arranged environment can direct children and provide them with the necessary resources, allows them to learn independently, even in the temporary absence of the educator (Al et al., 2012).

3. 2. Educator education-moral and spiritual preparation in the Montessori vision

An essential montessorian concept, the inner preparation of the educator, is found very little in the pedagogical analyses that consider this method. For the success of the pedagogical model she built, Maria Montessori insisted on the special training of teachers, who should not only aim at a baggage of knowledge and skills, but more than that. Educators are called in this context to develop moral skills and attitudes. The author's statement, drawn from thorough observations and educational practice, is that "the educator should not imagine that he can prepare for his mission only through study, becoming a man of culture. Before anything, the educator must cultivate certain moral skills. The crucial point in the whole matter is the manner in which it concerns the child, and this cannot depend on external factors, as if it requires only theoretical knowledge of the child's nature and ways of teaching and correcting. What we want to emphasize here is that the educator must prepare internally" (Montessori, 2018, p. 107). After the educator understands and assumes the necessary training and improvement, she is directed to assume the role of mentor and facilitator in the learning process that takes place in the kindergarten. Her mission becomes, first of all, that of a facilitator in the child's self-education, being a coordinator of individual activities and of the whole class. She acts as a guide that guides, motivates and supports children in achieving progress both individually and collectively (Felea, 2003).

The insistence of Montessori pedagogy on teacher training has been argued in numerous conferences held around the world, with a special emphasis on the major importance that inner teacher training has, explicitly stating that: "the educator must be 'initiated' in his inner training. He is too concerned about the bad tendencies in the child, he thinks about how to correct his unwanted actions or about the danger left in his soul by the residues of original sin". As a solution, the author considered that the educator, instead of this, should start looking for his own flaws, those tendencies in him that are not good, first "to remove the beam from his eye, after that he will see better so that he can remove the straw from the child's eye. Inner preparation is something general, it is not the same as the specific search for perfection, as is the case with members of religious communities. There is no need to become perfect, to have no weakness to become an educator. It is even possible that those constantly concerned with the perfection of their inner life remain unaware of the defects that prevent them from understanding the child. That is why it is necessary to learn, to be guided, to be trained to become educators" (Montessori, 2018, pp. 107-108).

The teacher must undergo a double course of training. On the one hand, it is essential to know thoroughly the field in which she works, and on the other hand, to understand the role of educational materials as development tools for children. Her theoretical training is difficult because it involves a deep process of self-formation, she is called upon to learn to observe carefully, to be calm, patient and modest, to control her own impulses and to carry out with tact and sensitivity, a mission predominantly practical. More than a simple book for the intellect, the educator needs, for the success of this pedagogical paradigm, a real exercise of discipline and enrichment of the soul (Montessori, 1977).

Data reported by the International Montessori Association show that educators working in institutions in the educational network are encouraged to participate in different and non-uniform religious or spiritual activities or practices, respecting the local cultural-religious particularities and specificity of the environment from which educators and children come, such as prayer, meditation or connection with nature, to support their personal and professional development, while detailing a model of good practice that includes training experiences from Mexico and Spain (Borbolla, 2025).

3. 3. Freedom as discipline-the prepared environment and the role of the adult

Montessori pedagogy insists on the close observation of the child and on the granting of the freedom that the educator offers in the activities: "if the educator respects the child's freedom and trusts him, if she has enough willpower to forget for a moment everything she has learned, everything that fills her brain, if she is modest enough not to consider her intervention to be essential, if she knows how to wait patiently, she will soon see that a total change is taking place in the child" (Montessori, 2015, p. 49).

In line with the nondirectivist pedagogies of the twentieth century, the author emphasizes the importance of perceiving each child as a unique being, with his own personality, a distinct intellectual potential and an individual learning style. Educators have a duty to respect the intrinsic value of each child and cultivate a passion for learning so that it persists throughout life. It is essential that both parents and educators understand and respect the pace of development and the peculiarities of each child, approaching him exactly as he is, not as he would like to be. Freedom of development is a Montessori principle, where it is the teacher or educator who ensures the practice of independence for every child in kindergarten. As Schumacher states (2019, p. 100) "the teacher must ensure that, at set times, children can work independently in their way of learning". Maria Montessori encourages the observation of the child by the teacher, when the specially prepared environment invites him to individual work according to his own interests and needs. From the point of view of Maria Montessori, "it is a delight to watch with what enthusiasm the child works when he is given freedom and when he finds at hand suitable objects with which to satisfy the desire for activity" (2022, p. 19). The model presented above places the author among the pedagogues who support a moderate nondirectivism, without the excesses sensed in the authors who encouraged the renunciation of any form of direct leadership or support of the child.

Montessori pedagogy calls teachers to behave with great care, to observe the child and to provide him with everything he needs to develop harmoniously, when it says: "now we must know how to control

ourselves, to retreat aside and observe him, to follow him from a certain distance, without exhausting him with our intervention, but also without abandoning him. We will almost always see him quiet, satisfied with himself, busy with a job that seems serious. What is left for us to do other than observe him? In this way a school in which children develop spontaneously through their activities is created, while the teacher is limited to a passive role, that is, exactly the reverse of what happens in ordinary schools, where the teacher assumes the active role, while the child must remain passive. The teacher must confine herself more and more to a role of mere observer as the children's progress increases" (Montessori, 2015, p. 60).

It is obvious that the constant supervision coming from the adult, along with his repeated warnings and arbitrary comments, interferes and hinders the development of the child, and all his beneficial forces, which could flourish, are suffocated. Under these conditions, the child has only one strong desire: to free himself as much as possible from any compulsion (Montessori, 2015). Therefore, the author insists "let us therefore give up the role of jailer and take care, instead to prepare an environment in which to tire the little one as little as possible with our supervision and with our teachings" (Montessori, 2015, p. 38). The more the environment is adapted to the needs of the child, the less the intervention of the educator can be. "I would not want you to think that the environment works some kind of miracles and that the adult is completely alien to this environment. The adult also has something to do: he must teach the child how to use objects", details Montessori (2016, p. 88). The essence of his argument is that the educator limits his role and intervention, in order to give freedom to the young child, but he is also the one who prepares and presents the objects with which the child begins to work in order to form his new acquisitions. It is essential, however, not to forget an important principle: giving freedom to the child does not mean leaving him alone or neglecting him. The support we offer him should not be manifested by indifference to his development difficulties, but by careful support, guided by caution and affection (Montessori, 2015).

In Montessori kindergarten, the educator never interrupts a child in a state of concentration, unless he notices that he needs support, does not know how to proceed, or disturbs other children. When he makes a mistake, the child is not immediately corrected, since it is considered that he has not yet fully assimilated that concept. According to Montessori (2022, p. 59), "the educator stands around, does not correct or interfere in his work. When something goes wrong, she waits for help to be asked, but most often the child will persist until he succeeds on his own". This is perseverance, the basis for the development of will, an essential component of personality. In kindergarten, children are happy, engaged and friendly. Because the educator respects each child and avoids interrupting him, they learn to treat each other with the same respect and kindness. These social qualities contribute to the charm and harmony of the personality of each child. "Our role is to give help when asked. If we take care not to interfere in the activities and interests of a child as long as they are not harmful, nature will take care of his development", details Maria Montessori (2022, p. 40).

From the perspective of contemporary pedagogy, the value of the Montessori method lies mainly in the fact that educators do not impose solutions on children, but encourage them to explore them and make their own choices, and through this experience, children learn to manage independently, even in the absence of adults. The Montessori educator does not resort to either punishments or rewards, considering that they are not necessary for the harmonious development of the child. At the same time, Maria Montessori argues that it is a mistake to believe that such methods teach children to obey the rules imposed by adults, since true progress comes from the inner strength of each individual, which is required to be cultivated with priority. While rewards can encourage vanity, punishments risk profoundly affecting a child's human nature. Montessori pedagogues believe that the most valuable reward for the child is the inner satisfaction that he feels when he manages to do something right, relying on his own abilities (Cazan & Petrescu, 2017).

The results of the research that took into account the capitalization in the present period of the pedagogy of freedom, a fundamental principle for teachers and students working in Montessori schools, show the impact and the long-term limits of uninterrupted work with elements such as free choice of activities (Lillard & Else-Quest, 2006), in the context of different understandings of the notion of freedom "within limits" (Marshall, 2017), which supports the understanding and capitalization in a broad theoretical and praxiological framework of the pedagogy of freedom, able to

position it as an "alternative path" towards the normative and standardized paths of educational systems (Archer, 2024).

3.4. Between manual work and digitization - Montessori education facing contemporary challenges

In the context of the increasingly frequent use of new digital technologies in education, we were interested for this research to analyze recent data on how Montessori education responds to new challenges, given its strongly defined peculiarities and the emphasis on creating the educational context favorable to the formation-development of children, respectively on manual activities, in specific educational approaches. Research exploring the relationship between pedagogical principles, including Montessori education, and the adaptation of teaching activities to the demands of the digital age underlines the need for continuity of Montessori values, the support of autonomy and free exploration, respecting the students' own pace in learning, even in digital contexts (Powell, 2016; Luo et al., 2023). At the same time, there is a real risk that technology will disrupt the student's attention, natural rhythm and direct relationship with the physical environment, for which the solution cannot be other than the training of Montessori educators to use technology as an extension of the prepared environment, and not as a substitute, in order to further facilitate the maintenance of human interaction and the experience of working directly with materials (Yuan, 2025; Powell, 2016).

Adaptive learning technologies developed especially in recent years, built on the foundations of artificial intelligence ("machine learning") and assistive innovations, strongly transform the classical landscape of education, facilitating highly individualized and accessible learning experiences (Chakraborty et al., 2025). Research data analyses show that the adaptation of Montessori pedagogy to the digital age and to new forms of technology-assisted learning requires further reflection on the possibilities of maintaining the fundamental principles of the method in an environment where interaction with technology becomes inevitable (Omidire et al., 2025), but the role of technology in classrooms in these schools is still intensely discussed (Jones, 2017).

Recent data from Romania show the use of technology in Montessori education indicating the use of the Kinderpedia platform as a good possibility to integrate the personalized evaluation of students with the entire effort on managing administrative aspects and with good communication with parents. The Montessori School in Bucharest reports that the Kinderpedia platform also allows immediate feedback, as well as improving the steps required by didactic planning and design, thus supporting better management of efforts to support the achievement of educational goals (Brezniceanu, 2025). At the same time, there is also the collaboration between Montessori schools for a continuous adaptation of the method to the socio-cultural realities in Romania and to the new challenges in education (Stephenson, 2023).

Efforts to adapt international pedagogical models to cultural and local particularities have led to the conclusion that a good collaboration between educators ensures a good design and realization of lessons or activities with a good alignment with the Islamic socio-cultural and religious practices of Saudi Arabia (Alhashim, 2022). In Nairobi, Kenya, Montessori House has implemented a program based on the HEI Schools Toolkit, standardizing the quality of education and helping to ensure a holistic education through very good access to tools that support the design and realization of education, to which teachers can add their own creativity (Muyodi, 2025). At the same time, research data that included primary school teachers working in Montessori schools showed that these are open to the use of software that facilitates learning in students in these schools, with a recommendation especially for the activity of adaptive meditations (Jones, 2017).

4. Conclusions and discussion

Maria Montessori's pedagogy remains, more than a century after its appearance, one of the most influential educational alternatives, especially marked by the conceptions of J.J. Rousseau on nondirectivism in the education of children and the preschool pedagogy of Fr. Frobel. Based on scientific observation and a profound anthropological conception of the child, the method proposes an

educational model centered on responsible freedom, the role of the prepared environment and the moral formation of the educator (Gentaz & Richard, 2022).

The analysis highlighted that the success of this paradigm derives from the balance between freedom and structure, between the independence of the child and the discreet guidance of the adult, as well as from the emphasis on self-education in a didactic environment organized as a formative space (Macià-Gual & Domingo-Peñafiel, 2021) and on the cultivation of intrinsic motivation (Momanu, 2016). The results are in agreement with recent research data (Demangeon et al., 2023) that support on the basis of a complex meta-analysis the actuality and efficiency of the Montessori method on self-directed learning, intrinsic motivation and holistic development.

At the same time, the research on Montessori pedagogy sheds light on an aspect little studied and often neglected in other paradigms: the need for the inner preparation of the educator. It is not enough to accumulate theoretical or didactic knowledge; it requires a moral attitude, the ability to observe, patience and modesty. From this perspective, the method does not propose only a training program, but a way of understanding the educator–child relationship in a deeply ethical manner.

At the same time, critical analysis can also highlight some limits or challenges of Montessori pedagogy. First, the integration of this method into traditional educational systems poses difficulties, especially at older school ages, because of its emphasis on individualization and the absence of standardized assessments (Fleming et al., 2023), which often contrasts with institutional requirements and the formation of skills imposed by integration into the labor market (Denervaud et al., 2019).

We believe that the main direction of analysis and action will target, including in Montessori pedagogy, the possibilities offered by new technologies in collecting and interpreting a large volume of data from students, including evaluation results, behavioral models, or activity history. Through adaptive learning platforms, personalized activities and quick adaptive feedback will be offered. However, a number of ethical elements raised by data privacy, biased or opaque algorithms or fair access remain in question (Chakraborty et al., 2025), aspects that can be compensated by a reconsideration of the training of educators, with a special focus on ethical challenges (Opriș, 2024b). The mentioned research priority is also supported by recent empirical data that reconfirm, for the investigated intervals, the fact that the efficient integration of technology in education brings a plus in learning in children (Crompton, 2023).

With all these challenges, Montessori pedagogy continues to provide a valuable benchmark for contemporary education. Through its emphasis on autonomy, responsibility, respect for the child and the cultivation of intrinsic motivation, the method contributes to shaping an education oriented towards the integral development of the human being. Its current relevance derives not only from empirically demonstrated efficiency (Demangeon et al., 2023), but also from the consonance with the modern trends of child-centered education, lifelong learning and the cultivation of socio-emotional skills.

Future studies will be able to support with additional research data the possibilities of adapting the Montessori method to the ever new realities in preschool education, in particular, but also in primary and secondary education, as a support for reconsidering the approaches regarding the initial and continuous training of educators in Romania, but also in other education systems supported by similar socio-cultural perspectives.

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