Use of Montessori Education for Therapeutic Purposes in Individuals with Special Needs

Використання Монтессорі-освіти в терапевтичних цілях для дітей з особливими потребами

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ABSTRACT

Introduction. The main idea of Montessori Pedagogy and Montessori Therapy based on it is to contribute to the development of the child by accepting them with their own personality and providing special ‘sensory development tools’ and activities suitable for the child’s ‘structure plan’.

Purpose. This study will focus on the therapeutic use of the Montessori method in infants and young children with special needs. Also, it is aimed to explain Montessori Therapy and its usage in the education of children with special needs in-depth and to evaluate the perspectives of parents of children with special needs on Montessori Therapy.

Method. The research is a descriptive study and includes compiling information on Montessori therapy and the results of interviews conducted with the families of five children with special needs. The research data consists of a literature review and family interviews.

Results. As a result of the research, parents of children with special needs stated that alternative preschool education (Montessori education) approaches for their children could be effective in helping children acquire basic life skills.

Conclusions. Montessori principles such as individualized learning, manipulative materials, freedom and discipline, natural environment, and continuous observation can help maximize the potential of these children. However, every child is unique, and the therapy may need to be constantly adapted to be effective. Therefore, practitioners of Montessori therapy should carefully observe and assess the needs of the children, and continuously update themselves with current research and best practices.

Key words: special needs, Montessori method, Montessori therapy, Montessori education, preschool children, parents of children with special needs.

Introduction

Current approaches acknowledge that each child has unique characteristics and needs. Children with special needs, due to various reasons such as different learning styles, developmental delays, or intellectual disabilities, may require a different approach from traditional educational methods. Montessori therapy is an innovative approach that focuses on the learning and development of these children. Montessori education is not only academic but also supports the child’s development in sensory and social areas, preparing them for real life (Doğru, 2009; Lillard, 2013; Murray et al., 2019).

The main aim of the educational model is to teach children to learn from an early age and create a freer space for them to acquire skills they may need throughout their lives and to be creative. Montessori education
is a system that supports the learning environment of children from early childhood to the end of adolescence. The method is child-centered, focusing on learning rather than teaching, allowing children to be free to do the activities they wish, with rules concerning work and material usage. Furthermore, it encourages an environment that allows children to explore and learn at their own pace. This method includes concepts such as manipulative materials, freedom and discipline, observation, and individualized learning. Montessori therapy is based on Montessori education principles to meet the needs of children with special needs. This approach emphasizes observing to understand children’s individual strengths and weaknesses and uses this knowledge to shape the learning environment (Lillard, 2013; Murray et al., 2019).

Montessori educational theory comprehensively supports the educational needs of children with special needs and provides an inclusive environment (Nehring, 2014). The concepts of Montessori’s educational theory initially emerged by examining children with special needs in-depth and later were further refined with neurotypical students. Pickering (1992) suggests in a study that Montessori education can increase learning opportunities for special needs children to choose their own activities and apply them concretely (with materials). Montessori’s scientific approach to education is rooted in studying and educating children with special needs. Montessori Pedagogy and the derived Montessori Therapy are based on accepting the child with their own personality and contributing to their development with special “sensory development tools” and activities appropriate for the child’s “structure plan”.

Montessori therapy is an independent therapy method that can be used on its own. This therapy method was developed by the Munich Development Rehabilitation Center. The return of Montessori Education to children with special needs changed with Professor Theodor Hellbrügge’s research in Munich in 1968, where he discovered that Montessori Education would enable the education of children with special needs and typically developing children together. According to Professor Hellbrügge, inclusive education has a very different meaning, especially from a social pediatrics perspective (Hellbrügge, 2009). The social development of children with special needs, especially in early childhood, and consequently their language and speech skills, will occur when they spend time with their typically developing peers.
However, teachers need to perform at a higher level for the development of children with special needs. The brains of children with special needs develop stronger neural connections in a richer learning environment (Zieher & Armstrong, 2016).

A comprehensive inclusion/integration education can help all students develop communication and interpersonal skills and learn how to work with their environments. However, one of the most significant benefits of an inclusive integration program is that all students learn to accept and respect each other as they are. Montessori classrooms, through the Montessori education method and philosophy, are a highly effective method for including special needs students in the classroom and society (Keenan, 2008; Montessori, 1967; Nehring, 2014).

In this research, it is aimed to explain Montessori Therapy and its usage in the education of children with special needs in-depth, and to evaluate the perspectives of the parents of children with special needs on Montessori Therapy. Also, it is planned to answer to the following questions:

RQ 1. What is Montessori Therapy and what are the basic principles of this therapy?
RQ 2. How can it be applied to the education of children with special needs? What are the processes?
RQ 3. What are the perspectives of parents of children with special needs towards Montessori Therapy?

Theoretical Basis of the Study

What is Montessori Therapy?
Montessori therapy can provide a wide range of services. The groups covered by these services include: Montessori therapy can offer a wide range of services. The groups covered by these services include children showing developmental delays, attention deficit hyperactivity disorder, intellectual disabilities, orthopedic impairments, visual and hearing impairments, autism, Down syndrome, and children with speech and language disorders. Additionally, it can also be used for adult groups with conditions like Alzheimer’s and others. In Montessori therapy studies, parents and therapists work together. Parents are guided to carry out the activities given in accordance with the Montessori Method with their children (Hellbrügge, 2009).
The Goals of Montessori Therapy:
(1) To support the overall development of individuals undergoing treatment through stimulating sensory-motor, cognitive, social, and emotional development processes.
(2) To prevent the risk of mental disorders.
(3) To reduce and balance existing illness and/or the negative effects caused by this illness.
(4) To support families in education (For example, encouraging parents to perceive their children positively and increase their competence in raising their children through video studies).
(5) To facilitate the individual undergoing treatment’s adaptation to their environment and acceptance by their environment by collaborating with their immediate environment (Hellbrügge, 2009).

The Basic Principles of Montessori Therapy
It is a structural work system that can be adapted to the needs of the individual undergoing development with scientifically developed Montessori materials based on a holistic development approach. The human schema to be considered in therapy work with children with developmental and perception disorders considers these individuals as children with developmental deficiencies in terms of their personalities and based on their abilities. Perceptual, psychomotor, and social behavioral disorders underlying developmental disorders are addressed with special materials and activities based on psychiatric diagnosis in children and adolescents (Ildız İlhan & Fazlıoğlu, 2020).

Materials Used in Montessori Therapy
In Montessori therapy, children can spontaneously choose the activities they need in an environment equipped with materials that appeal to their senses, according to their sensitive periods. The materials used in Montessori therapy consist of four main groups as recommended by M. Montessori. These are daily life materials, sensory materials, mathematical materials, and language materials. The materials appeal to all ages. The materials not only positively affect the child’s development but also enable the child to use and develop their own potential. One of the most important features of materials is that they are diagnostic aids. Montessori materials developed according to the principles of special
education are also used in collaboration with the family. It is important to transfer the therapy to the home environment. Exercises are given to the family to be performed at home. The goal is to develop synapses in the brain and normalize the parent-child relationship with these exercises and repetitions (Ildız İlhan & Fazlıoğlu, 2020).

Processes to be Carried Out for Adapting Montessori Therapy to Children with Special Needs

(1). Individualized Learning: Montessori therapy adopts an approach that is suitable for each child’s different learning pace and style. This is especially important for children with special needs because each of them has unique needs. Therapists select and organize learning materials based on the child’s strengths and interests.

(2). Manipulative Materials: Similar to Montessori education, Montessori therapy also encourages learning through concrete materials. This is known to be particularly effective for children with special needs as it supports learning through visual and tactile stimuli.

(3). Freedom and Discipline: Montessori therapy provides children with a sense of freedom and responsibility while maintaining a disciplined environment. This balance is crucial for children with special needs because a sense of freedom increases self-respect, while a disciplined environment provides security and structure.

(4). Natural Environment: Montessori therapy encourages a natural learning environment, which includes a balanced, orderly, and safe physical environment. This is important for children with special needs to promote learning and minimize external stimuli that cause stress.

(5). Observation and Evaluation: Montessori therapy directs the learning process by continuously observing and evaluating children’s progress. This process is particularly important for identifying the strengths and development areas of children with special needs (Vaz, 2024).

Montessori therapy is used in children with special needs to support development in motor, sensory and perceptual, language, cognitive, social, and emotional areas, and to improve the quality of life.
of various age groups. In the Montessori education system, the inclusion of children with special needs is implemented through individual and group therapies, practical life exercises, and integration programs with typically developing peers. The use of Montessori therapy in children with special needs supports the development of motor skills, self-awareness, movement perception, senses, perception, thinking and speaking skills, imagination, attention, memory, and personality development (self-awareness and evaluation, self-confidence, self-esteem, self-control skills). Thus, the quality of life is improved. However, when the studies on the use of Montessori Therapy in children with special needs are examined, it is observed that there are limited studies on the use of inclusion programs or Montessori therapy in classrooms and with special needs students despite the presence of numerous educational institutions worldwide (public educational institutions and special education institutions).

Special schools often do not want to accept such students because their education generally requires more time, they have different needs, and usually, collaboration between family-expert-teacher is necessary (Cossentino, 2010; Shank, 2014). Studies show that another Montessori practice, peer-assisted teaching, can greatly benefit the learning of children with special needs. A. Lillard (2005) mentioned in his studies that peer-assisted teaching is generally the most beneficial method for students playing the role of learners. However, he also states that students playing the role of teachers also benefit from this education. M. Murphy-Ryan (2017) states that Montessori education is a suitable method for overcoming the difficulties children with attention deficit disorders face in focusing, improving their learning capacities, and meeting their needs. Studies show that the Montessori method plays an important role in supporting the development of both typically developing and special needs children. In this study, the use of the Montessori method for therapeutic purposes in babies and young children with special needs is addressed.

**Method and Techniques of the Research**

**Methodology:** The research is a descriptive study consisting of compiling information on Montessori therapy and qualitative data
including the results of interviews with the families of five children with special needs.

**Study Group:** This research is a descriptive study that includes compiling studies on the use of Montessori therapy in children with special needs and evaluating the perspectives on this therapy system, based on the opinions of five parents. All participating parents are mothers with an average age of 32. Additionally, the children participating in the study are between the ages of three and six, with disabilities including autism spectrum disorder, intellectual disabilities, Down syndrome, and multiple disabilities.

**Data Collection and Analysis:** During the data collection process, information obtained from published thesis and articles in Google academic databases using key phrases such as “Montessori and special needs children”, “Montessori therapy”, “Montessori therapy in babies and young children with special needs” constitute the research data. Additionally, a pilot application was conducted by interviewing five parents to evaluate their perspectives on Montessori therapy. The interview consisted of 8 semi-structured questions and after the questions were prepared, they were reviewed by six academics specialized in special education, preschool education, and Montessori education, and the final form of the questions was determined. Subsequently, interviews were conducted with five volunteer mothers using the face-to-face interview technique. A brief introduction to the Montessori method was provided to the parents at the beginning of the interview, and discussions were held regarding their knowledge level on the Montessori method and topics they were curious about. The qualitative data obtained at the end of the interview were interpreted in the findings and discussion section.

**Results**

This section of the research presents the results of the interviews conducted with parents. The prominent responses of parents to each question are provided below:

1. The common answer of the parents to the question: “Are you familiar with Montessori education, which is one of the alternative methods used in preschool education?” was yes.
(2). When considering the individual special needs of their children, parents collectively stated that this method is suitable for their children.

(3). In response to the question: “How can the Montessori education approach be adapted to meet the special needs of your child?” one parent stated: “Every child is different and learns in different ways. My child learns better through experiencing the new, touching, feeling, tasting, in other words, through a holistic method and experiencing it rather than memorizing new information”. Another parent provided an example: “For example, to encourage tooth brushing, I put a high-based child step in front of the sink. While cooking, I put height in front of the counter because he likes to help me”.

(4). The common response of parents to the question: “To what extent do you think a child with special needs can adapt to the principles of freedom, independence, and learning at their own pace emphasized by the Montessori method?” was that they thought their children might have difficulty in adhering to these principles. One parent expressed their thoughts: “It is a variable situation depending on the child’s condition or degree. However, I believe my daughter can adapt to these principles to a high extent. A child who can independently perform tasks at her own level”.

(5). When asked: “Considering your child’s special needs, how can you adapt your home environment to be suitable for such an approach?”, one parent mentioned starting to integrate the Montessori method into their child’s room. “Her room has a table and chair suitable for her height. Everything in her room is designed for her use. We try to arrange everything for her comfort”, – they said.

(6). Responses to the question: “How would you like to accommodate such learning experiences tailored to your child’s special needs, focusing on individual work and self-discovery typical of Montessori education?” varied among parents. One parent mentioned various outdoor activities while another emphasized the importance of the child’s desire.
(7). Parents emphasized the importance of using materials in teaching processes for their children’s learning. They also mentioned the costliness of obtaining Montessori materials and suggested alternatives.

(8). Regarding the question: “How can a child with special needs strike a balance between providing freedom and ensuring safety?”, parents emphasized the importance of setting rules, teaching boundaries, and maintaining a controlled safe environment.

In line with the responses of the parents, it was observed that they had a positive view of Montessori education and its use for children with special needs. They are aware of the different needs of their children and how Montessori Education helps to meet these needs by providing freedom and an individualized learning environment. Also, parents seem to be willing to apply Montessori methods outside of school settings such as at home to reinforce daily life skills.

**Discussion**

As a result, Montessori therapy is an alternative method to help children with special needs to acquire basic life skills as well as academic knowledge. Although Montessori Therapy is originally designed for typically developing children, it has been discovered that children with special needs can benefit from this therapy, too. Relevant literature supported the fact that this therapy method increases the learning of children with special needs by giving them independence in a secure environment and providing individualized learning that is specific to their needs. Thus, Montessori Therapy can be used both in special education schools, in classes consisting of only children with special needs, and in inclusive classes where typically developing students and students with special needs are learning together. Additionally, classrooms where Montessori Therapy is adapted provide an environment where children have access to daily routines and materials, which can be adapted to suit their needs. The Montessori method also provides learning opportunities suitable for the mental structures of children with learning difficulties, such as intellectual disabilities and autism. W. Fidler (2003) emphasizes that Montessori education can make a real difference for children with different learning, emotional, and behavioral disorders, and special
learning difficulties. J. Pickering (1992) found in his study on preschool inclusion education that the Montessori education program enables children with special needs to achieve success beyond expectations.

It is found that the perspectives of parents are in line with the literature. According to the results of the interviews, parents of children with special needs have a positive view on Montessori therapy. Parents believe that Montessori therapy improves the learning experience of their children. In fact, some of the parents try to adapt the Montessori therapy in their daily life to support the learning of their children. Besides they highlighted the fact that the costs of Montessori materials are quite high and obtaining them is not very easy. They have suggested alternatives to make the application of Montessori therapy easy for them since the materials are also important in the learning process.

Conclusions

Montessori therapy offers an effective approach to support the learning and development of children with special needs. Montessori principles such as individualized learning, manipulative materials, freedom and discipline, natural environment, and continuous observation can help maximize the potential of these children. However, every child is unique, and the therapy may need to be constantly adapted to be effective. Therefore, practitioners of Montessori therapy should carefully observe and assess the needs of the children, and continuously update themselves with current research and best practices. Only in this way, they can provide the most effective learning and development environment for children with special needs. Montessori pedagogy and therapy are considered holistic approach methods that apply principles of visibility, systematicity, sequence, development, and human pedagogy in education and therapy. Therefore, its use in special education is important. Individuals working with children with special needs should be informed about Montessori education and therapy.

ADHERENCE TO ETHICAL STANDARDS

Ethics Declarations. All procedures were performed with the permission of the participants for the processing and analysis of their data. Also, inform
consents were given to them before the interview and only consenting parents participated in the study.

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### References


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**ANOTAÇÃO**

**Вступ.** Основна ідея Монтессорі-педагогіки та заснованої на ній Монтессорі-терапії полягає в тому, щоб сприяти розвитку дитини, приймаючи її такою, якаю вона є, і надаючи спеціальні “інструменти сенсорного розвитку” та види діяльності, котрі відповідають “структурному плану” дитини.

**Мета.** Це дослідження буде присвячене терапевтичному використанню методу Монтессорі у роботі з немовлятами та дітьми раннього віку з особливими потребами. Крім того, воно має на меті поглиблено пояснити Монтессорі-терапію та її використання у навчанні дітей з особливими потребами, а також оцінити погляди батьків дітей з особливими потребами на Монтессорі-терапію.

**Метод.** Дослідження є описовим і включає збір інформації про Монтессорі-терапію та результати інтерв'ю, проведених із сім’ями п’яти дітей з особливими потребами. Дані дослідження складаються з огляду літератури та сімейних інтерв’ю.

**Результати.** У результаті дослідження батьки дітей з особливими потребами зазначили, що альтернативна дошкільна освіта (Монтессорі-освіта) для їхніх дітей може бути ефективною у набутті дітьми базових життєвих навичок.

**Висновки.** Принципи Монтессорі, такі як індивідуалізоване навчання, відсутність маніпулятивних матеріалів, свобода і дисципліна, природне середовище і постійне спостереження, можуть допомогти максимально розкрити потенціал таких дітей. Однак кожна дитина унікальна, і терапія може потребувати постійної адаптації, щоб бути ефективною. Тому фахівці, які практикують Монтессорі-терапію, повинні уважно спостерігати та оцінювати потреби дітей, а також постійно знайомитися з сучасними дослідженнями та найкращими практиками.

**Ключові слова:** особливі потреби, метод Монтессорі, Монтессорі-терапія, Монтессорі-освіта, діти дошкільного віку, батьки дітей з особливими потребами.

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