Intervention Model for Amelioration of the Disruptive Behaviors in Children with ADHD. A Case Study

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Abstract. The ADHD is a chronic physiological disorder that interferes with a person's ability to regulate and inhibit their behavior and to support attention in solving tasks, in ways appropriate to their level of development. The current study aims to present a recuperative program that we conducted with a five year old boy. The initial and final assessment were conducted with developmental screenings from PEDa Platform (Cognitrom, Cluj-Napoca) and we also used the CBQ Questionnaire. We analyzed the current situation of the subject, applied the recuperative activities and compared the results with the final assessment. We discovered some differences in the scores, although not as large as we would expect. The results are discussed in the context of the family environment and of the importance of the developmental milestones that children with ADHD have to attain.

Keywords. Intervention model, ADHD, disruptive behaviors.

1. ADHD – A literature review

ADHD is a mental disorder that is usually identified in childhood and is quite discussed in the scientific literature. Barkley (1990) states that the name of the disorder describes its main symptoms: lack of concentration and hyperactivity, alongside impulsivity, which has been included in hyperactivity, as result from dysfunctional inhibitory behaviour.

Attention is a cognitive ability that directs concentration and helps people understand the world around them, by focusing on important stimuli, while filtering and ignoring those that are not relevant (Young & Smith, 2017). Lack of attention is a characteristic manifestation and appears as an automatic, unwanted disconnection, a frustrating state of non-presence of mind (Mate, 2019).

As Wender & Tomb (2017) point out, it was first called "hyperactivity", then "attention deficit disorder or ADD", to differentiate between children with ADD without hyperactivity. The official term was set by psychiatrists, based on the underlying symptoms of the disorder, which were published by the American Psychiatric Association in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5, 2016). The definitions in this handbook are unanimously recognized and used among physicians and in research.

According to DSM-5 (2016), ADHD is a neurodevelopmental disorder characterized by attention deficit, disorganization, and/or hyperactivity-impulsivity. The first two characteristics lead to "inability to maintain focus on a task, apparent lack of listening and loss of objects, being inappropriate for age and level of development. The last characteristic leads
to a state of agitation, excessive activity, disruption of other people's activities and inability to wait - symptoms that are excessive for age and level of development.

Rief (2005) offers a consistent literature review regarding the definitions of ADHD, conceptualized by several researchers and specialists in the field, such as:

- ADHD is a neurobiological behavioral disorder characterized by degrees of inattention, chronic developmental inadequacy, and in some cases hyperactivity;
- ADHD is a brain disorder caused by uneven development of the central nervous system, both in structural and neurochemical areas;
- ADHD is a disorder of human behavior that all people sometimes manifest to some degree. Those with ADHD have exaggerated symptoms in a form inappropriate to their level of development compared to other people of the same age;
- ADHD is a disorder of development of self-control, consisting of problems with attention, impulse control, and activity;
- ADHD is a chronic physiological disorder that interferes with a person's ability to regulate and inhibit their behavior and to support attention in solving tasks, in ways appropriate to their level of development;
- ADHD is a neurobiological behavioral disorder that results in a high degree of variability and inconsistency in performance;
- ADHD refers to a set of associated chronic neurobiological disorders that interfere with an individual's ability to regulate activity (hyperactivity), inhibit behavior (impulsivity), and participate in tasks (inattention) in ways appropriate to the individual's level of activity development;
- ADHD is the most common neurobehavioral disorder in childhood. It is also one of the most common chronic health conditions affecting school children;
- ADHD is a non-behavioral disorder defined through differences in brain structure and function that affect behavior, thoughts, and emotions;
- ADHD is characterized by a constellation of problems of inattention, hyperactivity and impulsivity, which are inadequate in terms of development and cause difficulties in daily life.

2. Symptoms and manifestations of ADHD in children

Kilian & Albulescu (2009) state the following signs of attention deficit in children:

- they do not seem to be listening, not hearing anything they are being told, or find it difficult to follow a conversation or instructions,
- they repeat the same mistakes because they omit the details, for lack of mental organization,
- they have difficulties maintaining task motivation or play concentration,
- they also have problems structuring an activity, they may focus on issues that are irrelevant to the task and omit what is important,
- their attention deviates very easily from a task if there are external stimuli,
- they forget information and confuse things,
- they appear to be scattered, disorganized, often wandering toys, clothes, supplies,
- if they are not motivated by something, they hesitate to get involved in tasks that they find difficult because they require continuous mental effort.

Hyperactivity is a physical condition with a high level of energy, inconsistent with the children's cognitive and developmental stage. Young & Smith (2017) note that this has often been associated with problems in the neural pathways and neurotransmitters in the brain, which
are responsible for sustained behaviors and attention, on one hand, or with certain diets, on the other hand. Impulsivity is associated with executive functioning skills such as planning, goal-oriented behavior, inhibition, and attention.

Kilian & Albulescu (2009) state that hyperactivity and impulsivity in children with ADHD appear in the form of:

- a constant state of physical agitation, restlessness of the whole body, exaggerated movements,
- in situations where they should be quiet, for example in class, they are constantly moving, sitting in a chair, climbing or even leaving the room,
- they have speed, they run faster than they go,
- they always appear to be in a hurry or late,
- they find it extremely difficult to carry out their activities in peace,
- they have difficulty playing, find it difficult to wait their turn or are irritated by the idea of following the rules,
- they find it difficult to temper their reactions when they are upset, the reactions are impetuous,
- they talk a lot, they don't have the patience to listen or frequently interrupt others, they often rush to answer a question that has not been asked yet and that has not been addressed to them.

3. Coordinates of development in preschoolers

Preschool is the stage of development between 3 and 6/7 years which can be divided into 3 periods according to Şchiopu and Verza (1997): the small preschooler (3-4 years), the middle preschooler (4-5 years), the high school preschooler (5-6/7 years). At this stage there is an important development of the child's physical abilities and mental skills, which contributes to a better adaptation of the child to various situations.

At this stage, the child is driven by curiosity to explore the environment, he is constantly learning, especially through games. It is the period in which habits regarding food, hygiene, clothing, handling of various objects are acquired and thus increases the child's autonomy (Verza & Verza, 2000).

From a physical point of view, the development of the child's movements can be observed in several directions: suppleness, balance, quality and lateralization (Sion, 2003). The evolutionary path starts from agitated walking, sudden gestures, passes to finer and better coordinated movements towards the age of 4 years and reaches wider, stronger movements towards the age of 6/7 years. The preschool stage is dominated by motor activity, and the result of this permanent exercise is the development of motor skills.

The first to develop are gross motor skills, which involve the use of large groups of muscles. With their help, children can perform activities that require basic motor skills. The next step is to develop fine motor skills, which involve using the small muscles of the hands, face and eyes. They are used in activities that require finer skills.

Psychic development is greatly influenced by the fact that there are more frequent interactions with other people than family members. By attending kindergarten, children have the opportunity to socialize with other children of the same age, with educators and thus are exposed to other patterns of behavior besides those in the family environment. They have to adapt to the new environment in which they will spend much of the day.
Thinking is in the preoperative stage, which means that symbolic, imagistic thinking predominates, but children can also perceive dual representations. From the age of 3, children understand the relationships between illustrations, maps and the objects or spaces they represent. Between 2 and a half and 5 years, children understand the causal link between two events close in time (Papalia, Wendkos Olds & Duskin Feldman, 2010). Children are able to identify similarities and differences between different objects, which allows classifications to be made according to two criteria. Furthermore, they know numbers, their order, counting, performing simple mathematical operations, comparing two sets of objects.

Language is evolving a lot in preschool. A number of authors (Crețu, 2009; Sion, 2003) mention that the development is more accentuated in terms of passive vocabulary, which is constantly enriched with new words, children being able to quickly understand the meaning of new words depending on the context. There is also a tendency to use diminutives frequently. Morphology and syntax progress from simple to complex forms. The language is adapted according to the context, using combined means of communication (verbal and non-verbal) to ensure understanding. Preschoolers have a habit of monologue out loud, without intending to talk to anyone. Some children may have difficulty pronouncing "r" or "s", and speech therapy is recommended. Some preschoolers have speech and language delays that affect rapid decipherment and thus vocabulary development. In the case of boys, the speech is done later than in girls.

Regarding memory, Verza and Verza (2000) mention that at the beginning of preschool predominates the involuntary one that relies on associations and not on analysis, and voluntary memory appears around the age of 5 years. The child memorizes a lot of information very quickly, but because there is no structure, no organization, he forgets very quickly. Reproduction is easy if the information has left a certain impression on the child. Recognition is more difficult for young preschoolers because of global perceptions and representations.

Involuntary attention is permanent, the preschooler showing great curiosity about the environment. The volume of attention increases, and the stability and concentration of attention evolves from 15 minutes to 3 years to 30 minutes to 6 years. Gradually, voluntary attention appears, initially in games, than it is extended to other activities (Crețu, 2009).

Regarding affectivity, Sion (2003) notes that at this stage emotions become more intense, more complex and there is a transition to feelings, as lasting emotional states and with a wider scope. Moral feelings like friendship, love, contentment, shame become more evident. Understanding emotions occurs in preschool, the child being able to identify both their own emotions and those of others (Sâlceanu, 2015). Specialized studies show that from the age of 3 children identify basic emotions such as joy, anger, fear, sadness, and at the age of 5 they can recognize shame, guilt, and embarrassment. Preschoolers can make different connections between thoughts, emotions, feelings, they can talk about emotions. The author points out that emotional understanding becomes more complex with age, so although at a young age, conflicting emotions (anger, fear-anxiety, sadness, envy-jealousy and disgust) are not well understood, this gradually changes.

The ability to identify and explain one's own emotions as well as those of others and to act accordingly represents emotional competence (Saarni, 1990, apud Denham, Caal, Bassett, Benga & Geagu, 2004). This is very useful in managing emotions and relating to other people, being an essential skill for mental balance and school success. Its structure includes: (1) understanding the emotions that represent the ability to recognize emotional feelings and their causes; (2) - the proper expression and experience of emotions, which in the opinion of Blair
(2002) involves their externalization in an appropriate way to relate to others; (3) emotional regulation that refers to the ability to control the behavior triggered by emotions.

Relationships with other children are very important in preschool, because during this period, the child begins to interact with other people, or other children outside the family. If he has brothers, it means that he has already had enough opportunities to practice how to defend his principles, or to negotiate. After 3 years they start to make friends and thus gradually learn reciprocity, socialization, empathy. Socially learned and accepted behaviors that facilitate a person's optimal relationship with others represent social skills (Gresham and Elliott, 1984 apud Squires, 2003). These skills allow you to adapt a person's behavior to interact effectively with others. The consequence of the development of social skills in preschoolers is the appropriate interpersonal relationships in the environments in which he spends his time. These skills involve sharing things or activities with others, asking for and offering help, initiating relationships, giving compliments. The importance of these skills derives from the fact that, with the entry into the social environment from kindergarten, the requirements of educators, colleagues are more complex.

Learning at this stage is natural in terms of information assimilated by the child from the social environment. With the attendance of kindergarten, learning becomes a process organized and led by educators and requires intense understanding, attention, verbal expression, memory of the child (Vrășmaș, 1999).

Self-image is gradually formed as cognitive abilities develop and the person faces the developmental tasks of childhood, adolescence and later adulthood. Self-esteem is the self-assessment of one's self-image, the child's opinion of his own worth, as a result of which cognitive development allows him to describe himself much better (Papalia et al., 2010). Up to 5 years, self-esteem is formed with the help of parental reactions, adult opinions. Therefore, positive, concrete, uncritical reactions to the child as a person contribute to high self-esteem.

The development of moral consciousness begins with the internalization of parental and social requirements, which occurs around the age of 3 (Crețu, 2009) and is based on the emotional relationship between children and parents. She is supported by the feelings and respect for the adult, whose authority is recognized.

Gaming is a basic activity present at all ages, with differences arising from the functions it performs (Sion, 2003). In childhood, play is extremely important, because through it the child learns, assimilates information, relates to other children and adults, uses his imagination, exercises his muscles, stimulates his senses, takes over behaviors, makes decisions.

The development of personal autonomy supports the development of personality on the other levels: cognitive, emotional, social, motor, etc. The more autonomous a child is, the more he will explore the environment, and will come into contact with various problems for which he will have to find strategies to solve. Therefore, this skill is important for school adaptation, being especially useful for children.

4. Objectives of the research
The main objectives of our study are:

- Studying and evaluating disruptive behaviors of research subjects.
- Elaboration of the psycho-pedagogical intervention program for the improvement of disruptive behaviors.
5. Sample and instruments
The research sample was represented by male children aged between 5 and 7 years, from urban areas, domiciled in Constanța. All four subjects live with their parents, have no siblings, attend kindergarten and follow a combination therapy program, which includes: speech therapy, sensory therapy, behavioral therapy, ABA therapy. For this article we chose to present the case of a 5 year old boy, that we will call Mateo, during our presentation.

We obtained the informed consent of their parents and ensured the confidentiality of personal data and results obtained.

Five surveys have been applied to verify our objectives:

• Screening of motor skills from the PEDa Platform,
• Screening of emotional competencies in the PEDa Platform,
• Screening of personal autonomy competencies in the PEDa Platform,
• Screening of social skills in the PEDa Platform,
• CBQ - Child Behavior Questionnaire.

6. Results and discussion
The anamnestic interview we conducted showed the following results: Mateo was born in Constanța, in August 2015. He goes to kindergarten and has no siblings. The child lives in very good material conditions with his parents in a 3-room apartment block. The atmosphere in the family is relaxed, the parents are concerned about the harmonious and balanced development of the child, the relationships between family members are good, based on love and understanding. Parents are particularly interested in the child's education and training.

Regarding the psychomotor development: the child held his head, sat down, walked on a leash, he started walking alone at the age of 1. He has an average degree of manipulation of objects. He runs through obstacles, descends the stairs carrying an object in his hands. He does not color different figures inside the contours, he does not manage to make a more complex puzzle or to join the pieces of an object that he disassembled, he does not cut textile material and he does not cut complex figures.

Attention is low; he maintains partial eye contact and has difficulty concentrating on a single activity, problems understanding longer instructions, or complex requirements. Memory is being trained. Thinking is in the preoperative stage. He needs concrete material. He is not aware of dangerous situations (crossing the street, using matches, etc.).

Language and communication are not well developed; the child communicates through sounds, gestures, verbal and non-verbal language, but is not well understood. It's eco-friendly.

Emotions are manifested inappropriately, in many cases it bites or pinches, both when it is angry and when it is affectionate. In situations where he is frustrated, or receives a refusal, he often cries and reacts aggressively, often biting and often not reacting to the feelings of others. He does not know how to identify his feelings, he does not recognize the emotional states of others and he does not express himself emotionally appropriate to the context, he is very irritated when he does not manage on his own.

Motivation is extrinsic and very difficult to achieve. Very rarely does he have the patience to wait his turn, even if he is promised a reward.
Temperament - Is a sociable child, who communicates with other children, extroverted, disinterested.

The behavior is very active; the child is always lively, full of energy, with difficulty staying calm. It is noisy, it has some initiative. She shows a low tolerance for frustration often cries when the task seems difficult and does not want to make an effort to solve it and bites when she is prevented from doing something she wants or when she has a misunderstanding with another child.

The initial assessment showed the following results:

<table>
<thead>
<tr>
<th>PEDa Screenings</th>
<th>Motor skills</th>
<th>Emotional skills</th>
<th>Personal autonomy</th>
<th>Social skills</th>
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<td>Parent s</td>
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<td>19</td>
<td>4</td>
<td>4</td>
<td>46</td>
<td>67</td>
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The results of the initial assessment showed low levels of development in all measured skills, with some differences between the assessment made by parents and those made by teachers. The results from CBQ complete our investigation and they are shown in the table below:

<table>
<thead>
<tr>
<th>Scale</th>
<th>Score</th>
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<tbody>
<tr>
<td>Activity</td>
<td>6.308</td>
</tr>
<tr>
<td>Anger/frustration</td>
<td>6.077</td>
</tr>
<tr>
<td>Positive anticipation</td>
<td>4.385</td>
</tr>
<tr>
<td>Attention focus</td>
<td>2.111</td>
</tr>
<tr>
<td>Discomfort</td>
<td>4.083</td>
</tr>
<tr>
<td>Ability to calm</td>
<td>3.308</td>
</tr>
<tr>
<td>Fear</td>
<td>2.083</td>
</tr>
<tr>
<td>Pleasure to intense stimulation</td>
<td>6.231</td>
</tr>
<tr>
<td>Impulsivity</td>
<td>6.000</td>
</tr>
<tr>
<td>Inhibition and control</td>
<td>1.692</td>
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</table>
The results of the initial assessment showed that our subject was in the risk group in terms of emotional, social and personal autonomy skills, having serious problems in their development. The motor skills are also insufficiently developed. CBQ showed scores higher than the normal limits in activity, anger/frustration, impulsivity and pleasure to intense stimulation, and scores lower than the normal limits in attention focus, ability to calm, fear, inhibition and control and pleasure in low stimulation.

The recovery and training intervention model was designed based on the results of the initial assessment. The recovery and training intervention included games, types of activities based on the development of motor, emotional, personal and social autonomy skills. The aim was to improve the scores obtained by retesting the participant.

The activities we conducted were the following:

1. **Let's draw a character** – The activity aimed for developing fine motor skills. The materials used were A4 paper, colored pencils and a few story books. The child was introduced to story books and was asked to choose the one he liked best. On this occasion, he was reminded of the correct way to hold the book, and how to browse it. To read the book, the child was asked to draw something related to his favorite story or character, and was encouraged to color every detail of the drawing.

2. **Guess what I drew?** – The activity aimed for developing attention and the spirit of observation, the formation of the skill of drawing objects and beings through drawing, the recognition of an object before it is rendered graphically in its entirety. The materials used were large sheets of paper and colored pencils.

3. **Wait, listen, execute!** – The activity aimed to develop movement coordination. The child has been warned that he is following a game in which he must be careful to execute an order received. The game instructions were presented, explaining to the child what to do when he heard certain words: at the word ONE the child had to stand still, at the word TWO he had to go back (normal walk), at the word THREE he had to walk before (normal gait), at the word FOUR he had to walk on top, at the word FIVE he had to take the step of the giant. After the game started, the words mentioned above were said at random.

4. **Candy box** – The activity aimed at developing the skillful speed of a task. The materials used were: 100 round chips of different colors and three plastic boxes of different colors (red, yellow, blue). This activity was performed along with 5 other children attending the same therapy center at a children's social gathering, the children were divided into three groups and presented with the task of the exercise - to imagine that the colored chips are candies and that as many as possible should be collected. Each team received...
a plastic box. After 5 minutes, the game stopped and the chips in each team's box were counted, with the team with the most chips in the box being declared the winner.

5. *Follow the route* was an activity with the objectives of developing motor skills, coordination, and speed of performing a task. The materials used were: eight colored circles with a diameter of 50 cm, four stones, a wooden bench with a height of 30 cm and a length of 1 m, a sports step platform, with the help of the listed materials a route was designed, which the children had to cover in a short time, taking care to follow the recommended movements (jumping in two legs in two legs in the circles placed at the beginning of the route, walking among the milestones without touching them, walking quickly in balance on the bench, jumping in the next two circles placed on the route and completing the route by jumping on two legs on the sports step platform).

6. *How do I feel today* ... had the aim of identifying and becoming aware of the emotions experienced, associating a verbal label with the emotional expression in the drawing. The materials used were sheets of paper and colored pencils. The subject was encouraged to use whatever colors he wanted. After making the drawing Mateo was asked to show it to his classmates and to name the emotion drawn in as many words as possible in the form of a short story. The aim of this activity was to correctly identify his emotions using appropriate verbal etiquette, and the familiarization with the possible causes of emotions. By developing awareness of their own emotional feelings, children acquire appropriate strategies for emotional regulation and subsequently optimal relationship with others.

7. *Guess the emotion* – was an activity that aimed to identifying emotions with the help of non-verbal cues, associating verbal labels of emotional expressions, identifying contexts for the manifestation of certain feelings and their possible causes. The materials used were images with people expressing different emotional feelings. Mateo had to identify the emotion of the person in the picture and then associate an object, phenomenon, which made the child feel like in the chosen image. The purpose of this activity was to support the acquisition of vocabulary about emotions, but also acquiring appropriate strategies for emotional regulation and optimal relationships with others.

8. *Emotion Detective* – aims to recognize and properly label one's own emotions and those of others, learning that in a given situation not everyone reacts the same way and practicing empathy. The materials used were the stories. The child read the story and was asked to mimic different reactions to the same situation. By observing the possible emotional reactions, the child's knowledge about appropriate or inappropriate ways of emotional manifestation is also developed, which will contribute to the development of emotional regulation. Correct identification and labeling of one's own and others' emotions are the basic competencies of emotional development and, implicitly, of optimal interpersonal relationships. Acquiring optimal emotional expression and recognizing the emotions of others will facilitate the adoption of emotional regulation strategies appropriate to the situation and the expression of empathy.

9. *What if ...* – Was an activity that aimed at identifying the consequences of emotions, recognizing emotions and labeling them correctly. The materials used were different short stories. A story was read to the child, which was interrupted each time a character followed. The child was asked to anticipate how the character would behave and to think. For each of the answers given, the child was praised, and when he had difficulty identifying the causes and consequences of his characters. The aim of this activity was to develop the vocabulary of emotions, to acquire verbal labels of emotions, to identify
the consequences of emotional feelings. All this supports the children in acquiring the skills necessary for emotional regulation and subsequent problem solving.

10. Discover the emotion and What if, .. – This activity combined the activities mentioned above, and the materials used were short clips with cartoon characters. The objectives were the correct recognition and labeling of one’s own emotions and those of others, identification the consequences of emotions, learning that in a certain situation not everyone reacts in the same way and practicing the manifestation of empathy.

11. We are preparing for a journey. The activity aimed at forming autonomy skills. The materials used were various pictures with objects. Mateo was told that with the help of this game he will learn how to prepare when going on a trip. It was specified that the whole family was traveling, so he had to select only the things they needed, and the task was to choose from the pictures presented the objects they would take on the trip, stating why they had chosen certain objects.

12. Choose the right clothes and shoes. The aim is to form autonomy skills. The materials used were tokens with plasticized images, representing seasons, items of clothing and footwear between which correspondences had to be made. We proposed this activity based on the results of the screening on personal autonomy which showed that the subject had difficulty in choosing the appropriate clothing items for the weather and location.

13. Let’s set the table for the party aimed at forming autonomy skills. The materials used were a square wooden table for four people, four chairs, a tablecloth, plates, glasses, cutlery, a jar of water. This was a group activity in which the children were given the task of arranging table for four people with the correct positioning of the chairs and crockery, pizza and a cake were served, and the children were asked to use the cutlery correctly for each dish. We proposed this activity based on the results of the screening of personal autonomy skills which showed that Mateo had difficulties in the proper use of cutlery.

14. I’m lost, what am I going to do? A story was read to Mateo, followed by a discussion. He was told what to do if he got lost: to stay in that place, to call a police officer, to ask an adult for help. The address and home phone number, the parents’ names were repeated.

15. Alone at shopping aimed at developing autonomy. Materials used were: tokens or paper to symbolize money. The child was informed about the theme of the game and was reminded of his mother's behavior when he wants to buy bread from the bakery, market fruits and vegetables, medicines from the pharmacy, etc. We insisted on how to ask for information about the product you want to buy, how to order the product, how to pay, etc. The child was asked to play the buyer, while the adult played the seller. We reminded the child that before going shopping he had to make a list of the products he would buy (he could draw the products on a piece of paper). The game was repeated in different contexts - buying bread, movie tickets, shopping at the market, etc. The scenario was repeated until the child managed to do well. It was suggested to the parents to go shopping with the child and let him buy the products, without intervening, except in case of need.

16. Lego Castle was an activity aimed to develop cooperation skills, practice toy sharing skills, request and offer help, wait in line, and acquire negotiation strategies. The child received a large number of cubes to build a castle, but small enough to force him to cooperate and share his materials. The roles of each in the construction of the castle
were negotiated. We facilitated the establishment and maintenance of friendships, the acquisition of the ability to he is involved in the games of others.

17. **The Cube Tower** aims to interact in a play situation, develop conversational skills, practice helping and cooperate in the game. The materials used were: cubes, picture of the cube tower. The child was asked to build with the adult a cube tower based on a model. The aim of the activity was for the child to collaborate with the adult in the construction of the tower. The child was helped to identify behaviors that facilitate the establishment and maintenance of friendships, and to practice pro-social behaviors.

18. **The mysterious object** aimed at developing conversational skills, practicing interpersonal skills through dialogue. The materials used were different classroom objects. The activity consisted of two stages. In the first stage the children were told that the adult had chosen a classroom object and they have to find out which one is by asking a maximum of 10 questions, to which the adult can only answer “yes” or “no.” In the second stage, the object in the room was chosen by one of the children, and the other children have been encouraged and praised for guessing the mysterious object.

19. **True Friends** aimed at recognizing in-game cooperation behaviors, practicing in-game cooperation skills. The materials used were various toys. This was a group activity in which children were divided into two pairs, each of whom had to play with the toys provided. They were observed during the game, intervening with suggestions on cooperative behaviors (offering help, asking for help, sharing toys, etc.). The children were praised for their cooperative behavior.

20. **Obstacle course** aimed at developing the skills of cooperation in play, developing confidence in others, teaching children to help each other. The materials used were various objects in the room. The furniture was arranged so that it became the needed obstacles that children had to overcome. One child was blindfolded with a scarf, and another took him by the hand and guided him through obstacles to the point of arrival. The game was repeated until each child participated in the game and had the opportunity to be guided. The children were praised for helping others along the obstacle course.

After the finalization of the recuperative program we conducted the final assessment. The results of the screenings in PEDa Platform are shown below:

<table>
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<td>Parents</td>
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</table>

Only the scores in motor skills were slightly developed and the ones in personal autonomy, compared to the initial assessment. The CBQ was also used in the final assessment, and the results are shown below:

<table>
<thead>
<tr>
<th>Scale</th>
<th>Score</th>
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The results of the final evaluation showed that Mateo showed small increases in the scores obtained in the four screenings, and a small evolution in terms of his development. The results show that he is still in the risk group; therefore it is necessary to continue to apply psycho-educational intervention measures.

Still, both parents and educators noticed that certain behaviors that were not initially reported occasionally occurred later (picking up toys without telling him after the game, caring for another colleague’s toy, or spontaneously helping another colleague, the right choice of clothes depending on the weather and location). In Mateo’s case, we think this is probably due to the associated deficiencies - polymorphic dyslalia and language delay. Out of all children in this recuperative program, Mateo was the most difficult to work with. It was particularly hard to understand what he was saying, thus the frustration levels were high both in our case and his. The results obtained in the final evaluation cannot confirm or disprove the effectiveness of the proposed and applied intervention model. The limitations of the research, which lasted only 4
months, and the fact that the proposed activities took place in 15 meetings with the research subjects must be taken into account may have contributed to these results.

7. Conclusion

The most important aspect of this study is the fact that improvements in the education of children with ADHD can be made, although these improvements can be slightly visible and hard to achieve. But one of the most important consequences is the impact that these necessary steps have on both the child and his family.

The presence of a child with ADHD in a family is really challenging for parents in the first place, but also for his siblings. Parents are stressed out, and most of the time they lack confidence in their own ability to be good parents for such a child. Parents struggle with unsuccessful attempts to discipline their child with ADHD, and if they are initially firm and very strict about their child’s inappropriate behavior, they are blamed for the child’s poor education. In those situations where those children receive medication with incentives it can be seen that they are much calmer, have a more flexible attitude and are therefore more easily disciplined by the same parents who seemed incompetent. They need to cope with the negative pressure of others about this disorder and reject prejudices about the reasons for the child’s misbehavior with ADHD in order to be able to provide the necessary treatment. It is also painful for them to notice that because of their typical ADHD behavior, their child is excluded from extracurricular activities or has difficulty making and keeping friends.

However, we think it is important to emphasize that in addition to disturbing behaviors, there are positive aspects to this disorder. Archer (2015) and Mate (2019) highlight the advantages of ADHD, the qualities of a child who thus has manifestations. These include:

- they are explorers, brave, curious, enterprising, so they could become good managers,
- they have creative thinking, are not limited in thinking,
- they have extraordinary abilities to do several things at the same time, to work under pressure,
- even though they may have difficulty concentrating on the task, when something interests them they may become hyper-focused, able to take an idea or task to new heights,
- they have the qualities of an athlete, can become a performance athlete,
- they have the skills to recover from crises,
- they have a positive attitude, innate endurance, high energy and a sense of humor that allows them to overcome challenges, failures and keep trying.

All these positive aspects are important to discover and to use in the therapy sessions as a base upon which developmental milestones can be reached. Furthermore, the importance of the therapeutic relationship, the empathic and supportive alliance (Enache & Avram, 2016) is an essential curative factor, which in our case proved difficult to attain.

References

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