HYDROKINESIOTHERAPY AND ITS RELATIONSHIP WITH THE SOCIAL ASPECTS OF CHILDREN WITH ASD

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ABSTRACT

Autism Spectrum Disorder (ASD) is a neuropsychomotor development disorder that manifests itself in socialization, behavior, cognition, and sensorimotor skills (Bezerra et al., 2021). Changes can be noticed from the first months until the end of life (Fonseca et al., 2019) and can be alleviated through appropriate treatments (Bezerra et al., 2021). Within physiotherapy, there are several treatment modalities capable of assisting with changes in children with ASD, among them is hydrotherapy (Ferreira; Ferreira, 2022). The objective of this work is to identify the influence of hydrokinesiotherapy on the parameters of socialization and interpersonal relationships in children with ASD. This is a qualitative, field research. The services were carried out at a Physiotherapy School Clinic of a University Center in Foz do Iguaçu - PR. The sample consisted of 3 children diagnosed with ASD who met the inclusion criteria of the study. A protocol was applied to work on aquatic psychomotricity through playful resources and circuits, consisting of 12 sessions. Responses to treatment were assessed through reports from the children's mothers, with an interview before the application of the protocol and another interview after the treatment. In the interviews, the children presented similar characteristics in a general context. However, the demands presented in the assessments through the mothers' reports were individual, specific and encompassed the physical, cognitive or social spheres. After the application of the aquatic psychomotricity protocol focused on the unique deficits presented by the participants, improvements were found in the reassessment in agreement with the assessment, that is, the main complaints initially portrayed were efficiently improved from the treatment carried out with specificity. The benefits presented after treatment demonstrate that the physiotherapist's work, using the concepts of aquatic psychomotricity and playfulness, can bring improvements in the school, family, and social spheres, and not just in the sensorimotor issue previously associated with the physiotherapist's role.

Keywords: ASD. Hydrotherapy. Social relations. Psychomotricity.

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INTRODUCTION

Autism Spectrum Disorder (ASD) is a neuropsychomotor development disorder that manifests itself by affecting socialization, behavior, cognition, and sensorimotor changes (Bezerra et al., 2021).

Characteristics such as little attention and interest in people and lack of nonverbal interactions such as exchanging glances, smiles, and gestures, as well as the delay or total absence of language, make it difficult to interact, especially with family members, who are the first social contact in the child's life (Fonseca et al., 2019).

Within physiotherapy, hydrokinesiotherapy, using water as a therapeutic and playful element, presents itself as a treatment modality capable of helping with changes in children with ASD (Ferreira; Ferreira, 2022).

Therefore, this study seeks to identify the influence of hydrokinesiotherapy on the parameters of socialization and interpersonal relationships in children with ASD.

THEORETICAL FRAMEWORK

AUTISM SPECTRUM DISORDER (ASD) AND SOCIAL INTERACTION

Autism Spectrum Disorder (ASD) presents characteristics such as: atypical development, behavioral changes, sensorimotor changes, repetitive or stereotyped behavior patterns, communication and social interaction deficits (Gaia; Freitas, 2022).

Behaviors such as little interest and attention directed at people and the deficit of nonverbal communication (such as exchanging glances, gestures and social smiles), resistance to changing routine steps and introducing new habits make their social interaction difficult (Fonseca et al., 2019).

As for games, they tend to play alone with specific objects and interests, performing repetitive actions, such as stacking toys, or placing them in increasing/decreasing order, not using them in a functional way (Fonseca et al., 2019). With all the manifestations of ASD and the time it takes to reach a diagnosis, it is common for parents to feel lost when faced with their children's difficulties, and once the diagnosis is made, they may feel anguish, fear, frustration, and feelings of pain and denial (Fonseca et al., 2019). This can negatively affect or hinder the child's relationship with their family members.

PHYSIOTHERAPY AND HYDROTHERAPY

Hydrotherapy is a physiotherapy resource that uses water and its properties for therapeutic purposes, whether in the prevention of diseases or in the treatment of functional alterations (Ferreira; Ferreira, 2022).

The responses obtained from hydrokinesiotherapy treatment include improved motor coordination, balance and motor skills, improved harmony of movements and body perception, improved sleep and reduced tension (Gaia; Freitas, 2022). In addition, hydrotherapy addresses the sensory aspect, which is a significant alteration in children with ASD, and stimulates confidence and self-esteem (Ferreira; Ferreira, 2022).

In a therapeutic and playful context, water helps in the development of skills for recognizing the body scheme and its relationship with reality, motor and sensory responses, and in the construction of safer and more trustworthy relationships (Gaia; Freitas, 2022).

METHODOLOGY

This is a qualitative field study. The sessions were conducted at a Physical Therapy School Clinic in Foz do Iguaçu - PR. The sample consisted of 3 children diagnosed with ASD who met the inclusion criteria of the study.

Interviews were conducted with the children's mothers in order to identify the main aspects that hinder their socialization. The interview was conducted in the form of open-ended questions to cover more details about the child's needs, and the responses were collected by recording the mother's speech. A protocol was formulated and applied to work on aquatic psychomotor skills, including playful resources and circuits, consisting of 12 sessions: 10 sessions of protocol sessions lasting 50 minutes each and the initial and final interview with the mothers (2 sessions).

The protocol was applied with its activities focused on the deficit that each child presented, and consisted of the following activities:

Table 1 - Service protocol

	OBJECTIVES	CONDUCT
1.	Work on balance and laterality.	The patient sits on a flexible board (EVA) and must balance while the therapist rocks the board in the water. Then, pick up objects from one side and the other while maintaining balance.
2.	Work on laterality and motor coordination.	The patient throws balls of different materials and sizes to hit a hula hoop that will be held in front of him (by the therapist) at a certain distance, alternating between the right and left hand.
3.	Work on motor skills and muscle strength.	Patient goes from one side of the pool to the other, only kicking their feet in the water, then kicking their feet and hands (therapist providing support in the trunk area).
4.	Work on laterality and fine motor skills.	Take colored balls from a basket and throw them into three different containers, which will be positioned at different distances, alternating between the right and left hands.
5.	Work on coordination, balance and body awareness.	Jump into the water, with both feet together, then just the right one, then the left one, alternating between feet, one forward and one back, opening and closing your legs, in time with the rhythm of the music.
6.	Work on balance, sensory stimulation	Patient sitting with the noodle between his legs, performs bicycle on the noodle.

7.	Sensory stimulation, muscle strength and balance work.	The patient will walk in the water, going from one end of the pool to the other carrying a balloon with different objects inside (beans, rice, corn...), with turbulence created by the therapist. Walking forwards, backwards and sideways.
8.	Work on balance, attention, respiratory muscle strength.	The patient will blow colored balls and balloons from one distance to another (defined by the therapist) under water.
9.	Work on motor coordination, laterality, sensory stimulation.	Ice cubes shaped like different fruits and in different colors will be thrown into the pool. The patient will pick them up with a spoon and take them to a designated area on a board that will float in the pool, separating them by color, alternating between the right and left hands. To reach the ice cubes, the patient will kick their feet with the help of the therapist.
10.	Work on balance and attention.	Patient will balance in the water on a PVC pipe covered with EVA.
11.	Control/identification of emotions, cognitive stimulation.	Playing with colors and emotions: the patient will fill colored containers with colored balls, identifying a color for each emotion and filling them according to what they are feeling, or what they felt that day.
12.	Work on balance and motor coordination.	Patient will sit on a noodle and balance while playing tic-tac-toe on the swimming board.
13.	Work on motor coordination and balance.	Throwing marbles into the pool with both hands and then picking them up from the bottom of the pool with your feet.
14.	Relaxation.	Patient lying down with cervical collar and support from therapist, will work on breathing.

Source: authors

RESULTS AND DISCUSSION

From the assessment and reassessment interviews conducted with the mothers of the three children participating in the research, it was possible to perceive several characteristics of ASD that were similar among them, as well as specific and individual complaints of each child, which were addressed again in the reassessment. These results were elucidated in the tables below:

Table 1 - Evaluation of patients 1, 2 and 3

Patient 1	**Patient 2**	**Patient 3**
Question 1: What is the level of ASD diagnosed? Level 1 support.	Question 1: What is the level of ASD diagnosed? Level 1 support.	Question 1: What is the level of ASD diagnosed? Level 1 support.
Question 2: What are the main difficulties that the child presents? Difficulty with social interaction; Difficulty with motor skills.	Question 2: What are the main difficulties that the child presents? A lot of difficulty at school; Subjects that interest him/her, he/she is interested in; Subjects that do not interest him/her, he/she does not care about; Difficulty eating; Lack of focus.	Question 2: What are the main difficulties that the child presents? Hyperfocus on subjects of interest; Socialization with other people; Lack of empathy; Not filtering what he says well; Lack of concentration; When it does not involve a subject of interest, he does not maintain focus.

Question 3: What are the child's social relationships like in general? Challenging; We try to include him/her in society; I see difficulties in society.	Question 3: What are the child's social relationships like in general? Active; Very curious; Communicative.	Question 3: What are the child's social relationships like in general? He doesn't have many friends; He doesn't talk to us much at home; Only about specific topics; He has always adapted better with older people.
Question 4: How is the relationship with the family? Extremely affectionate; Calm; Hypersensitivity to sounds; Cannot be around screaming children; Difficult interaction.	Question 4: What is your relationship with your family like? Very affectionate; Calm.	Question 4: What is your relationship with your family like? Quite turbulent; Establishing a routine.
Question 5: What are the child's social relationships like at school? It was more complicated before; We didn't have much support; This phase was difficult for him; This year has been a very positive experience; He is interacting, in his own way, carefully, but interacting.	Question 5: What are the child's social relationships like at school? Quite a bit of difficulty learning.	Question 5: What are the child's social relationships like at school? He doesn't know when he's being annoying; He doesn't fight, but he gets called out all the time; He's losing focus; The issue of studying is very difficult; It's not something that interests him, except for a specific subject.
Question 6: How is the child's relationship with friends? Never played together; Own way of playing; Didn't fit in with others; Hyperfocus on one person only; Different subjects for age; Very few friends; This year he is interacting; Today he has this exchange.	Question 6: How is the child's relationship with friends? Lots of friends, even.	Question 6: How is the child's relationship with friends? He doesn't have many friends.
Question 7: What is the mother's relationship with the child like? Affectionate; There is a lot of empathy; I see a lot of myself in him; It is easy for us to exchange.	Question 7: What is the mother's relationship with the child like? Very affectionate; Very attached to me; Does not stay away from me.	Question 7: What is the mother's relationship with the child like? Today we remain somewhat distant; He has always been my partner; We have always been very good friends.

Question 8: What is the father's relationship with the child like? Extremely affectionate.	Question 8: What is the father's relationship with the child like? Very attached.	Question 8: What is the father's relationship with the child like? He is unable to have that intimacy with his father; They are very close when it comes to making messes; He respects his father more; They have a good connection.
Question 9: Are there any difficulties with motor skills, eating, or getting dressed? Lack of muscle tone; Inability to do certain activities; Food selectivity; Only one type of food; Only comfortable clothing; Sensitivity.	Question 9: Are there any difficulties with motor skills, eating, or getting dressed? Shoes have to be super comfortable; She doesn't accept jeans; She can't wear them.	Question 9: Are there any motor, eating, or dressing difficulties? We are getting on your nerves a lot every day; This monitoring is necessary; You have been complaining a lot about back pain; Sensitivity to chicken; You can't eat at all; Talco nos pés, tem uma restrição ali que ele não consegue.
Question 10: Have you ever had any previous treatment? Psychologist; Speech therapist; Psychomotor therapist; Educational psychologist.	Question 10: Have you ever had any previous treatment? Psychopedagogue.	Question 10: Have you ever had any previous treatment? Psychologist; Psychiatrist; They recommended a psychopedagogue.

Source: research authors

ASD AND CHARACTERISTICS IN SOCIALIZATION

During the assessment, when asked about the children's social relationships in general, the mothers of the research participants reported obstacles, citing the challenge of including children with ASD within society, due to the obstacles that society presents to inclusion. The difficulty in making friends and adapting to social interactions appropriate for their age was also mentioned.

In line with the paragraph above, ASD presents limitations in communication and social interaction, which are amplified due to restricted or stereotyped attitudes and interests, a deficit of emotions and feelings, little social interest, and easy loss of focus and concentration when carrying out group activities (Nunes et al., 2021).

During the research, the mother of child 3 claims that the child has always adapted better with older people, due to the limitations of interaction on topics not specific to his interest. This characteristic is also mentioned in the interview with the mother of child 1, when she says: “But his topics were always very different for his age. So, children didn't have much patience. So, finding a little friend who understood a little bit was complicated”, reinforcing the characteristic of difficult interaction with other children.

According to Silva et al., (2023), children with ASD do not usually cope well with routine changes, demonstrating opposition or annoyance. Many children also develop an intense interest in a specific activity or object, called hyperfocus.

Hyperfocus and a total lack of interest in subjects outside the child's focus topic are mentioned in all three interviews by the mothers as being something very present in their relationships, in statements such as “Subjects that interest her, she is interested. And subjects that don't interest her, she doesn't care.” (mother of child 2), and “Because he has this issue of hyperfocus on subjects that interest him...”, “it's not the subject I want, he doesn't stay” (mother of child 3).

Regarding the emotional issue, children 1 and 2 are reported as being extremely affectionate and calm, especially in family relationships. The third patient, however, is described as someone who presents a “lack of empathy”, “cannot filter what he says well”, “does not know when he is being bothersome”, demonstrating the deficit of emotions and feelings reported in the literature.

The issue of lack of focus and concentration also appears in the interviews. The mothers of children 2 and 3 describe their children's lack of concentration as a pillar of difficulty in school learning and daily activities.

In all interviews, the deficit in social interaction was mentioned as something present in the children's lives, with reports of having few friends, suggesting obstacles in making new friends, associated with little interest in "common" and social matters and hyperfocus on specific subjects. According to the report of the mother of child 1, he has his own way of playing and it is unusual to play with other children, saying that "he never played together much" and "When we took him to the playground, somewhere, he always waited for all the children to leave so he could go."

PHYSICAL AND MOTOR CHANGES

The DSM-V (2014) considers ASD as a disorder that presents a dyad of impairments: repetitive and stereotyped behavior patterns and impairments in social interaction and communication.

In relation to repetitive and stereotyped behaviors, it was possible to notice during the sessions the need for children to carry out activities in patterns, for example, separating the balls by color when throwing them and when putting them back in the ball pit (first all the yellow ones, then all the green ones, and so on). It was also possible to notice that each child had one or two colors of balls that they did not like, trying to remove them from the

activities. When questioned, the answers were such as: “Blue is not nice”, “I don't like to leave that color together with the others”, “It doesn't look good together”.

According to Silva et al., (2023), the motor development of children with ASD is atypical, presenting lack of coordination and unsatisfactory movements, difficulty in developing notions of time and space because they have difficulty deciphering the sensory data received.

The deficit in motor coordination was cited by the mother of child 1 as a main difficulty of the child. In this aspect of notions of time and space, it was possible to notice in participants 2 and 3, during the sessions, problems with the concepts of right and left and some difficulty in activities such as hitting the balls in the chosen containers, demonstrating the deficit in coordination and associated notion of space. Playful activities were carried out so that these concepts could be internalized and learned, and at the end of the sessions, the children were able to carry out the activities using them correctly.

The playful element works as a facilitator of children's learning and development. It helps them explore the universe around them, get to know the world and broaden their horizons, making the environment interesting and the activities and learning engaging and enjoyable (Sousa et al., 2022).

As explained by Sousa et al. (2022), playful activities in the school classroom make it possible to bring meaningful teaching and development to children, as play attracts interest and allows them to go beyond the real world and transform it into the imaginary. The opposite also applies, in addition to providing an environment conducive to expressing desires, emotions and strengthening emotional bonds.

This concept of playfulness applied in school environments can also be used in physiotherapeutic approaches, as was the case in this study, which incorporated aquatic psychomotricity and playfulness into the therapeutic process, creating a welcoming environment for children with characteristics of deficits in social interactions.

In a study by Soares and Lambertucci (2024), it was concluded that aquatic physiotherapy is effective and leads to improvements in both the motor and social aspects of these patients. It can also provide relief from muscle pain, greater relaxation, stress reduction, improving sleep quality, organizing thoughts, and working on attention and confidence, as demonstrated by Polli et al., (2024).

In the results found with the treatment, the mother of child 3 reports a decrease in the back pain that the child complained about, in addition to saying that her son is calmer, more relaxed and has a better sleep routine, also demonstrating the physical effects of the treatment.

Children with ASD tend to perform much less physical activities than neurotypical children, with the attempt to avoid group activities and interaction being a major contributing factor to this aspect (Nunes et al., 2023).

In the interview with the mother of child 1, it was reported that the child was unable to do certain activities at school and therefore did not participate in physical education classes, which constitutes an obstacle to interaction.

In addition to motor deficits, several sensory deficits were mentioned. The mother of child 1 reports food selectivity, that her son's food "has a certain texture and only one type of food", and the difficulties encountered socially related to this issue, such as: "many times, when we go out or something like that, we always have to choose that one (food of the texture that he eats), or take it, or go to a party, we have to take something for him to eat". She also reports the difficulty of finding clothes for her son, saying that "When I go to buy clothes for him, he is always the one who touches them, 'this one is comfortable'. So we don't buy much based on appearance, but on touch, right?" and hypersensitivity to sounds, so he uses earmuffs in places with a lot of noise.

The issue of sensitivity to clothing textures also appears in the interview with the mother of child 2, in the statement "Shoes have to be super comfortable. I have to take her to try them on. She... Jeans she doesn't like. Leggings she... things like that that are tight or have some fabric that bothers her, she doesn't wear...". This mother also reports food selectivity, saying that eating is one of the child's main difficulties. In the interview with the third mother, in statements about hypersensitivity, she reports that her son "can't eat chicken at all" and "powder on his feet, he has a restriction there that he can't do".

According to Mattos (2019), children with ASD have very different behaviors in relation to sensory aspects than neurotypical children. In the present study, it is possible to see the prevalence of hypersensitivity in the participating children, where they feel stimuli from the environment excessively and have difficulty dealing with these stimuli and consequent emotions.

CHILDREN'S PSYCHOMOTRICITY AND SOCIALIZATION

According to Abreu et al., (2024), in physiotherapy, using the principles of psychomotricity, it is possible to provide patients with ASD with greater psychomotor, social and communicational progress, providing a discovery of their own interior in space, allowing the child with ASD to live more satisfactorily in the environment.

Psychomotricity is based on three areas: movement, intelligence and emotion, assuming that development occurs in connection with these three areas (Silva et al., 2023).

In order to achieve the objectives of psychomotricity, the psychomotricity program must be carried out according to individual and collective interests (Silva et al., 2023).

In the protocol applied, exercises focused on balance, fine and gross motor coordination, proprioception, body and spatial perception, emotion control and self-knowledge were performed, applied according to the child's greatest needs. It was possible to see an improvement in these abilities during the consultations, and in a report of the perception of the mother of child 1 there was an improvement in the child's motor coordination.

Therefore, the development of the body plays a fundamental role in the construction of other affective, cognitive, emotional and social skills (Polli et al., 2024).

ASD AND FAMILY RELATIONSHIPS

According to Saad and Bastos (2024), childhood brings with it many challenges and obstacles that are characterized as formative for human development and the person in adulthood. The complexity of this phase can be increased when associated with a peculiarity such as ASD.

In families with children in this context, the dynamics are more complex, since the changes that a child with ASD presents and the understanding of their diagnosis impact all family members (Saad; Bastos, 2024).

Many times, the guilt experienced by parents is due to the feeling of helplessness in not being able to control certain behaviors of their children and even of society (Saad; Bastos, 2024). In the interview, the mother of child 1 describes her son's social life as challenging, discussing her attempts to include him in society in the best possible way, but having the perception of an unprepared society to deal with differences and not open to social inclusion.

The children are portrayed as calm, affectionate and attached to their mothers in all the interviews, in phrases such as “I see a lot of myself in him, it's easy for us to exchange”, or “she's very attached to me, she doesn't stay away”. Only the mother of child 3 reported that “we've always been very good friends” and describes him as her partner for life, but reports that, at the moment, “we keep a little distance from each other”. The mother associates this with the beginning of her son's entry into adolescence.

When asked about the paternal relationship, the mothers reported that the children are also very attached and affectionate with their fathers, but not as much as the maternal relationship. In a coincidental divergence, the same mother (child 3) who reported a difference in the question about the maternal relationship, reported that “they both have a

good connection", but the child "cannot have the same intimacy with the father", in the sense of sharing experiences with him.

Regarding family relationships in a general context, the mothers of children 1 and 2 reported good interactions and affectionate behavior from the children. However, the mother of child 1 reported difficulty with her son's little cousins, who scream a lot and due to the hypersensitivity to sounds he has, he cannot be close to them, even though he wants to interact: "He always talks, I like it a lot, but he can't be close. So, he avoids it, goes to his room. Trying to do something else, right? Always with mufflers".

The mother of the third child in the study, however, reports that family relationships are currently troubled, due to the beginning of adolescence and the implementation of the routine required after the diagnosis is given to the child, saying: "Nowadays, we are very troubled, because we are implementing a routine for him, right, like the doctor asked. So, he is being very reluctant...".

Hilário et al., (2021) argue that, when a child is diagnosed, it is common for feelings of denial and even grief to arise, as parents lose their "idealized child" and worry about the uncertain future of their children and the obstacles they will have to face.

In the interview with the mother of child 2, the strangeness of being told about the diagnosis of ASD is reported, and the phrase "we, as mothers, never want to believe it, right", is cited, demonstrating the phase of denial following the diagnosis. The mother of child 1, on the other hand, reports that it was easier to accept the diagnosis due to previous experience with her older son, having already gone through the phases of acceptance previously. Furthermore, the third mother reports that she sought help because "we always noticed that he was different, but 12 years ago we didn't have as much information and access to doctors as we do today". The mother reports a late diagnosis, but with a calmer acceptance due to the previous understanding that her son was "different".

There is also concern and apprehension about the child's future life, given that he or she faces challenges and obstacles that other children do not face (Saad; Bastos, 2024). In the interview, the mother of child 3 mentions her concern about implementing the routine and adaptations recommended by doctors so that her son can adapt and better cope with young adulthood, so that he or she can add this to his or her life and provide a better quality of life, "when he or she will no longer have a mother or father to take care of him or her".

The mother of the first child in the study reports the desire for her son to interact with his or her younger cousins in the future, when they are all older and understand the issues that her son presents, and the happiness in seeing that he or she is interacting more, in general, at school than in previous years, demonstrating a concern and persistent thoughts

about the child's future. However, both mothers speak in a hopeful manner and express confidence that their children's future will improve.

PHYSIOTHERAPY IN THE SOCIAL RELATIONS OF CHILDREN WITH ASD

According to Polli et al., (2024), ASD changes are mainly visible from early childhood, so the ideal for the child's development to be more satisfactory is an early diagnosis and the immediate beginning of interventions.

However, in children participating in the study, the diagnoses were closed late, being the child 1 aged 8, the 2 -year -old child and the 3 -year -old child. The accounts of mothers of the last two participants show that late diagnosis was due to lack of information on the subject and lack of knowledge to recognize the characteristic signs.

From the reevaluations, in which the mothers were questioned about what effects they perceived on children through the treatment performed, several perceived benefits were reported.

It can be said that the benefits found in children were identified in accordance with the deficits reported by mothers. Thus, the mother of the first child reported a deficit in motor coordination in the evaluation, and improvement of it and concentration in reevaluation.

The mother of the second child, in the assessment, dealt with the learning difficulty and in the school scope as the main complaint of the child, and reported improved focus and concentration capacity as an element of improvement in her learning and school performance. Already the mother of the third child, who reported more physical changes, such as agitation and back pain, presents physical results as improvement after treatment. That is, the protocol focused on the needs of the child brought benefits in the areas where they had greater deficits initially.

Physiotherapy has always focused on the development and improvement of physical skills, with the objective of reducing these characteristic limitations of the Tea disorder (Nunes et al., 2023). However, little is said about how physical therapy, working on these physical skills that present themselves in deficit in children with ASD, can bring numerous benefits in their social and interpersonal relationships, facilitating the relationship with their self and the environment in which they live .

Pointed out by Polli et al., (2024), psychomotricity associated with the aquatic environment generates effects on the individual's self-knowledge, body awareness, understanding of space and time, learning and acceptance of motor stimuli. Water provides

knowledge of one's own body differently and broader, bringing improvements in functionality and social interaction.

Therefore, physiotherapy, through the approach of the concepts of aquatic psychomotricity, can work to bring not only motor, but social benefits to children, improving their relationships and coexistence in many contexts, such as school, family and social.

FINAL CONSIDERATIONS

Given the above and the discussions in this study, aquatic psychomotricity associated with the element of playfulness proved to be an efficient therapy for improving the social and interpersonal relationships of children with ASD who participated in the study.

With the application of the aquatic psychomotricity protocol focused on the unique deficits presented by the participants, improvements were found in the reassessment in agreement with the assessment, that is, the main complaints initially reported were efficiently improved through the specific treatment.

The benefits presented after the treatment demonstrate that the work of the physiotherapist, using the concepts of aquatic psychomotricity and playfulness, can bring improvements in the school, family, and social spheres, and not only in the sensorimotor issue previously associated with the role of the physiotherapist.

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