PSYCHOMOTOR INTERVENTION BASED ON ORGANIZATION OF THERAPEUTIC SETTING IN CYCLES FOR CHILDREN WITH AUTISM SPECTRUM DISORDER

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SUMMARY

The objective of the research project is to compare the effects of a psychomotor intervention program based on the organization of therapeutic settings in cycles, with the effects obtained by a conventional psychomotor intervention program based on an activity circuit on the motor development and participation of children with Autism Spectrum Disorder (ASD). This is a randomized controlled clinical trial with a blinded evaluator that will involve 30 children diagnosed with ASD. The participants will be evaluated one week before the intervention, one week and one month after the end of the interventions, using the Childhood Autism Rating Scale, the Autism Classification System: Social Communication, the Motor Development Assessment Battery, and the Participation and Environment Measure for Children and Youth. The interventions will be held twice a week, carried out over four consecutive weeks, totaling eight sessions of 45 minutes each. The experimental group will carry out the psychomotor intervention program based on the organization of Therapeutic Setting in cycles. The control group will carry out the psychomotor intervention program. In both interventions, the psychomotor structures of balance, tone, body awareness, laterality, spatial organization, gross motor skills, and fine motor skills will be focused on in the proposed activities. The results will be statistically analyzed assuming a significance level of $p \leq 0.05$.

Keywords: autism spectrum disorder, child, motor development, rehabilitation, psychomotricity.

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Introduction

Autism Spectrum Disorder (ASD) is characterized by a condition that develops in a symptomatic set, where various developmental markers occur in a peculiar manner. It is considered a high-complexity condition with multifactorial etiology, where genetic and environmental factors are related to neurodevelopmental disorders (CHASTE; LEBOYER, 2012).

In the field of physical rehabilitation, motor alterations are observed, which, although they do not restrict the acquisition of independent walking, represent an important complaint from family members and caregivers, as a serious factor limiting the child's overall performance in daily activities. Currently, scientific evidence provides a basis for a better understanding of the impact of the association between sensory processing problems and motor deficiencies in children with ASD, which affect neuropsychomotor development from the early years of life (BEN HASSEN et al., 2023).

Psychomotor intervention, also known as psychomotor therapy for children with ASD, is a specific intervention modality focused on approaches centered on body movement, carried out by a psychomotor therapist. It is based on a conceptual framework that considers "the mutual influence of cognition, emotion, and movement and their influence on the development of the individual's competence within a psychosocial context" (PAQUET et al., 2016, 2019).

Psychomotor intervention practices are defined as a set of educational and therapeutic approaches that address the expression of the individual's bodily movement related to social, emotional, and cognitive functioning when provided by a psychomotor therapist (EMCK, 2014). The psychomotor therapist is a professional who works in health, social, and educational environments recognized in different countries in Europe and Central and South America. The main approach of the psychomotor therapist is through playful and movement-based experiences to provide each child

with the opportunity to explore, experiment, learn, and feel competent in their body in interaction with the environment (FRAZÃO; SANTOS; LEBRE, 2023).

In fact, psychomotor rehabilitation can be considered a safe and effective therapy for many neurodevelopmental disorders. However, limited studies have been conducted on the population with ASD, especially in children. In this context, more rigorous research on psychomotor rehabilitation is necessary to understand the benefits, effectiveness, and ideal approaches of such interventions for this specific population (FRAZÃO; SANTOS; LEBRE, 2023).

Thus, the objective of the research project is to compare the effects of a psychomotor intervention program based on the organization of therapeutic settings in cycles, with the effects obtained by a conventional psychomotor intervention program based on an activity circuit on the motor development and participation of children with ASD.

Methodology

This is a randomized controlled clinical trial with a blinded evaluator that will involve 30 children with ASD, aged between three and ten years.

The participants will be evaluated one week before the intervention, one week, and one month after the end of the interventions. Each evaluation will consist of the application of the following instruments: Childhood Autism Classification Scale (PEREIRA; RIESGO; WAGNER, 2008), Autism Classification System: Social Communication (TAJIK-PARVINCHI et al., 2023), Motor Development Assessment Battery (FRANCISCO ROSA NETO, 2020), and Participation and Environment Measure - Children and Youth (GALVÃO et al., 2018).

The interventions will be held twice a week for four consecutive weeks, totaling eight sessions of 45 minutes each. After the initial assessment, the participants will be randomly assigned to the experimental group or the control group. The experimental

group will carry out the psychomotor intervention program based on the organization of Therapeutic Setting in cycles, which will involve the execution of psychomotor activities appropriately distributed in four activity cycles, with two Therapeutic Settings being structured for each participant. The Therapeutic Setting 1 will be conducted in the 1st and 3rd week of intervention, and the Therapeutic Setting 2 will be conducted in the 2nd and 4th week of intervention. The control group will carry out the conventional psychomotor intervention program, which will involve the execution of psychomotor activities carried out in an activity circuit, with the activities organized randomly. In both interventions, the psychomotor structures of balance, tone, body awareness, laterality, spatial organization, gross motor skills, and fine motor skills will be focused on the proposed activities.

The results will be statistically analyzed assuming a significance level of $p \leq 0.05$.

Expected results

It is expected that the organized intervention with the therapeutic setting in cycles will increase the development potential of those evaluated in their psychomotor structures, especially in the structures where the individual shows a deficit, compared to the work done with the same psychomotor structures in an intervention in the form of random circuits. These results will be measured through an evaluative process carried out with Francisco Rosa Neto's Motor Development Scale, contributing to the improvement and increase of psychomotor activity in this population.

Conclusion

The research project schedule involves the start of recruitment and evaluation procedures in December 2024. The results obtained will be analyzed and presented in scientific articles.

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