

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

Rafael dos Anjos Silva¹
Sara Viana de Abreu Silva²
Paula Soares da Silva³
Caroline Priscila de Oliveira⁴
Giselle Araujo Ferreira⁵
Marcele Paganoto Garcia Rodrigues da Silva⁶
Amanda Macedo de Freitas Souza Ramos⁷
Marcela de Oliveira Araújo⁸
Luanda André Collange⁹
Claudia Santos Oliveira¹⁰
Evangelical University of Goiás – UniEVANGÉLICA¹⁻¹⁰

Abstract

The objective of this 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 a circuit of activities on the motor development and participation of children with Autism Spectrum Disorder (ASD). This is a randomized, blinded, controlled clinical trial involving 30 children diagnosed with ASD. Participants will be assessed one week before the intervention, one week and one month after the end of the interventions, using the Childhood Autism Rating Scale, Autism Classification System: Social Communication, Motor Development Assessment Battery, and Participation and Environment Measure - Children and Youth. The interventions will consist of two sessions per week, carried out over four consecutive weeks, totaling eight sessions lasting 45 minutes each. The experimental group will undergo the psychomotor intervention program based on the organization of Therapeutic Settings in cycles. The control group will undergo 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 analyzed statistically assuming a significance level of $p \leq 0.05$.
Keywords: autism spectrum disorder, children, motor development, rehabilitation, psychomotor skills.

Introduction

Autism spectrum disorder (ASD) is characterized by a condition that develops in a symptomatic set, where several developmental markers occur in a peculiar way. It is considered a highly complex condition with a multifactorial etiology, where genetic and environmental factors are related to neurodevelopmental disorders (CHASTE; LEBOYER, 2012).

In the field of physical rehabilitation, motor changes 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 better understanding how sensory processing difficulties and motor impairments affect 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, performed 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 an 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 an individual's body 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 settings recognized in different countries in Europe and Central and South America. The main approach of the psychomotor therapist is usually through playful and movement-based experiences, in order 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 in the population with ASD, especially in children. In this context, more rigorous research on psychomotor rehabilitation is needed to understand the benefits, effectiveness, and optimal 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 activity circuits on the motor development and participation of children with ASD.

Methodology

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

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

The interventions will take place twice a week for four consecutive weeks, totaling eight sessions lasting 45 minutes each. After the initial assessment, 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 Therapeutic Setting organization in cycles that will involve psychomotor activities appropriately distributed in four cycles of activities, with two Therapeutic Settings structured for each participant. Therapeutic Setting 1 will be carried out in the 1st and 3rd weeks of intervention, and Therapeutic Setting 2 will be carried out in the 2nd and 4th weeks of intervention. The control group will carry out the conventional psychomotor intervention program, which will involve psychomotor activities performed in a circuit of activities, 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 in the proposed activities.

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

Expected Results

It is expected that the intervention organized with the therapeutic setting in cycles will increase the development potential of those evaluated in their psychomotor structures, especially in the structures in which the individual presents a lag when compared to the work performed with the same psychomotor structures in an intervention in the form of random

circuits. These results will be measured through an evaluation process carried out using the Francisco Rosa Neto 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 assessment procedures in December 2024. The results obtained will be analyzed and presented in scientific articles.

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