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The Effects of Slackline Training on Motor Skills in Children with Autism **Spectrum Disorder**

Oral Presentation

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Abstract

Introduction: The purpose of the current study was to investigate the effect of slackline training for children with ASD on motor skills.

Methods: In this quasi-experimental design, 40 children aged between six and 9 years were randomly divided into two groups; an experimental group (n=20) and a control (CON) group (n=20). The experimental group participants participated in three times weekly, 45-minute aquatic exercises for eight weeks. The Bruininks-Oseretsky Test of Motor Proficiency - Short Form (BOTMP) was used to assess motor skill.

Results: Significant differences were found between the ROA and CON groups in static balance (F=43.60, p=0.002), dynamic balance (F=44.51, p=0.010). Slackline training was found to be an effective and safe intervention for children with ASD in Balance.

Conclusion: This study provides families, teachers, and other specialists with an alternative to traditional landbased exercise modes that are more exciting and motivational to children with ASD due to slackline training.

Keywords

autism; Balance; slackline training; motor skill

Reference:

1. Reyes-Ferrada, W., Plaza, P., Jerez-Mayorga, D., Chirosa-Rios, L., & Peñailillo, L. (2021). Effects of slackline training on core endurance and dynamic balance (Efectos del entrenamiento en slackline sobre la resistencia del core y el equilibrio dinámico). Retos, 41, 756-763.

2. Sansi, A., Nalbant, S., & Ozer, D. (2021). Effects of an Inclusive Physical Activity Program on the Motor Skills, Social Skills and Attitudes of Students with and without Autism Spectrum Disorder. Journal of Autism and Developmental Disorders, 51(7), 2254-2270.

3. Tiner, S., Cunningham, G. B., & Pittman, A. (2021). "Physical activity is beneficial to anyone, including those with ASD": Antecedents of nurses recommending physical activity for people with autism spectrum disorder. Autism, 25(2), 576-587.