

Effect of a Hippotherapy Intervention Program on Static Balance and Strength in Adolescents with Intellectual Disabilities

Source: Giagazoglou, P., Arabatzi, F., Dipla, K., Liga, M., & Kellis, E. (2012). Effect of a hippotherapy intervention program on static balance and strength in adolescents with intellectual disabilities. *Res Dev Disabil*, 33(6), 2265-2270. doi: 10.1016/j.ridd.2012.07.004

Purpose:

This study examined hippotherapy's effect on static balance and strength in adolescence with intellectual disability (ID)

Design/Methods:

The participants in this study were 19 adolescences age 13-17 years old with intellectual disability. They were divided into and experimental group and control group equally based on their age, height, weight, school placement and IQ levels. There were 10 participants in the experimental group and 9 participants in the control group. Before the treatment started all of the participants' balance abilities were assessed. The participants completed three tasks while standing on an EPS pressure platform that recorded planter pressure and assess their balance. They performed Double-Leg Stance (DLS) with opened and closed eyes and One-Leg Stance (OLS) with opened eyes. Each participant was asked to hold each stance for 30 seconds. Muscle strength was assessed for all of the participants as well. The intervention was a 30-minute hippotherapy session twice a week for 10 weeks led by a physical therapist.

Results:

The results of this study showed a significant improvement in One-Leg-Stance balance and muscle strength.

Conclusion:

This study concludes that hippotherapy improves the static balance and muscle strength in adolescences with intellectual disabilities.

Strengths:

The strengths of this study include having a control and experimental group and studying an area that does not have a lot of research on.

Limitations:

Small sample size

Future Research:

There needs to be more research in this area as well as different impairments that can be benefited by hippotherapy.

Practical Applications:

Adolescences with intellectual disabilities can benefit from hippotherapy. This treatment can lead to improved muscle strength and balance, which can improve function in their daily occupations.