

Benefits of Hippotherapy in the Acquisition and Improvement of Psychomotor and Mathematical Skills - A Case Study in Individuals With Intellectual Disability

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Introduction

From an early age, hippotherapy has been recognized as a therapeutic instrument that can be used as a complementary or alternative way to traditional therapies in order to minimize clinical aspects of the disability.

Objetives

This case study evaluated the effects of hippotherapy on psychomotor and mathematical skills in young adults with intellectual disability and compared the effects after 9 months.

Methods

This study included 3 adults (1 female and 2 male) with intellectual disability aged between 26 and 39 years. A hippotherapy protocol was performed for 30 minutes, once a week, for 9 months. A grid of observation of psychomotor and mathematical skills was applied to the participants (members of the Associação de Amigos da Pessoa Especial Limiana, A.A.P.E.L.) at the beginning and after 9 months of the school season. Direct interviews were conducted with the AAPEL's technicians and hippotherapy professionals about the participants' riding skills and behaviours. This

study was approved by the Ethical Committee of the University Fernando Pessoa. Participation in this study was voluntary, and informed consent was given by the legal guardians. For the organization and processing of data it was used the Excel software.

Results

There was a significant evolution for psychomotricity, especially in balance, coordination and fine motor; social interaction; communication; and behaviour. Also a significant difference in the relationship between participants' achievements with the horse and the development of mathematical skills was observed.

Conclusions

Weekly sessions of hippotherapy improved psychomotor and mathematical skills in young adults with intellectual disability after 9 months.

Keywords: hippotherapy, intellectual disability, young adults, psychomotor, mathematics.