

## Effects of Therapeutic Horseback Riding in Speech and Communication Skills of Children with Autism

**Authors :** Aristi Alopoudi, Sofia Beloka, Vassiliki Pliogou

**Abstract :** Autism is a complex neuro-developmental disorder with a variety of difficulties in many aspects such as social interaction, communication skills and verbal communication (speech). The aim of this study was to examine the impact of therapeutic horseback riding in improving the verbal and communication skills of children diagnosed with autism during 16 sessions. The researcher examined whether the expression of speech, the use of vocabulary, semantics, pragmatics, echolalia and communication skills were influenced by the therapeutic horseback riding when we increase the frequency of the sessions. The researcher observed two subjects of primary-school aged, in a two case observation design, with autism during 16 therapeutic horseback riding sessions (one riding session per week). Compared to baseline, at the end of the 16th therapeutic session, therapeutic horseback riding increased both verbal skills such as vocabulary, semantics, pragmatics, formation of sentences and communication skills such as eye contact, greeting, participation in dialogue and spontaneous speech. It was noticeable that echolalia remained stable. Increased frequency of therapeutic horseback riding was beneficial for significant improvement in verbal and communication skills. More specifically, from the first to the last riding session there was a great increase of vocabulary, semantics, and formation of sentences. Pragmatics reached a lower level than semantics but the same as the right usage of the first person (for example, I make a hug) and echolalia used for that. A great increase of spontaneous speech was noticed. The eye contact was presented in a lower level, and there was a slow but important raise at the greeting as well as the participation in dialogue. Last but not least; this is a first study conducted in therapeutic horseback riding studying the verbal communication and communication skills in autistic children. According to the references, therapeutic horseback riding is a therapy with a variety of benefits, thus; this research made clear that in the benefits of this therapy there should be included the improvement of verbal speech and communication.

**Keywords :** Autism, communication skills, speech, therapeutic horseback riding

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