

Abstract

Title of diploma thesis: Sensory integration and praxis - literature review

Summary: The aim of the literature review is summary of academic findings and information from foreign sources about the basic concepts of sensory integration by Dr. A. J Ayres. To describe the mechanism of sensory integration during the physiological development of the child and to discover the possibilities of dysfunction of sensory integration with focusing on Sensory Integration and Praxis Tests (SIPT) by Dr. Ayres. Furthermore, it aims to make an analysis of studies in which was used SIPT to identifying dysfunction of sensory integration and praxis, find the characteristic features and specifics of dysfunctions in children with Asperger's syndrome (AS) and autism spectrum disorder (ASD), with attention deficit hyperactivity disorder (ADHD), with learning disorders, in delinquent - prone individuals and institutionalized children against to control group, compare the results with studies using imaging equipments and evaluate the possibilities to use the information for physiotherapy.

Methods: Diploma thesis is compiled from an accessible literary sources as a theoretical work in the form of literature review and it has two parts. In the first part is summarized theoretical background dealing with the basic concepts of sensory integration by Dr. Ayres. Second, descriptively - analytical part, includes analysis of studies in which was used SIPT to identifying dysfunction of sensory integration and praxis in different individuals, interpretation of characteristic features and specifics of dysfunctions against to control sample, comparison of studies with imaging findings and critical evaluating of this findings for physiotherapist.

Results: The results have shown difficulties with vestibular - proprioceptive processing, tactile and proprioceptive - related functions in children with AS; with somatopraxis and vestibular - related functions in children with ASD; with praxis and bilateral integration and sequencing and vestibular - related processing in children with ADHD; with form and space perception and visual motor coordination in children with learning disorders; with vestibular - proprioceptive processing in delinquent - prone individuals; with praxis, vestibular - proprioceptive processing, visual motor coordination and form and space perception in institutionalized children.

Keywords: sensory integration, Dr. A. J. Ayres, dysfunction of sensory integration, Sensory Integration and Praxis Tests (SIPT)