Abstract

Title: Sensorimotor difficulties in children with speech impairments

Objectives: The main aim of the thesis is to assess sensorimotor functions of children with speech disorders using standardized test batteries.

Methods: 27 children were part of the study (21 boys, 6 girls), all with speech disorders from an elementary school in the age range 11-15 (12,4 years±1,05). Motor skills were tested with data collection testing batteries MABC-2, Unifittest 6-60. Furthermore, sensory functions were tested using the Nottingham Sensory Assessment. Probands were also provided with a supplementary questionnaire to gather additional information. In the next step a data matrix was created in Microsoft Excel where all data were input. Data analysis was conducted using programs Microsoft Excel and Jamovi.

Results: Children with speech disorders showed higher prevalence of motor difficulties compared to Czech norms. According to the overall STS score in MABC-2 test, 63 % (17) were in the range of significant motor difficulties, which is 13 times higher than the norms. A statistically significant relationship between the Unifittest and MABC-2 was proven. In addition, a positive correlation was also confirmed between the BAL component of the MABC-2 and the long jump task in the Unifittest 6-60. Among the sensory functions, a statistically significant correlation relationship was confirmed between tactile perception and the throw and catch component in MABC-2. No relationship was found with the MABC-2 among the other qualities of sensing. The correlation between the number of associated difficulties and motor test scores was not confirmed.

Keywords: speech disorder, developmental dysphasia, children, diagnostics, motor, sensory function