

Abstract

Title: Effectiveness of exercise based on developmental kinesiology compared to stretching in functional disorders of young school-aged children

Objective: The aim of this study was to evaluate and compare the effectiveness of exercise based on developmental kinesiology and stretching for young school-aged children with postural deviations.

Methodology: This diploma thesis is of an empirical-theoretical nature, utilizing experimental research and processed quantitatively using case studies. The work was processed qualitatively using case studies. The study group comprised 14 young school-aged pupils with functional musculoskeletal disorders. The pupils were randomly divided into 2 experimental groups. The research intervention involved exercise interventions for each group, utilizing developmental kinesiology principles for one group and simple stretching for the other. Interventions were conducted twice a week under professional supervision and once a week at home under parental supervision, over a period of 5 months. Data collection methods included observation, examination of shortened muscles, selected tests according to Kolář, and balance tests based on the MABC-2 testing battery.

Results: The results indicated that the first group, which performed exercises based on developmental kinesiology, showed greater improvement in functional postural deviations in 6 out of 7 subjects, with minimal improvement in one subject. Improved balance was also more evident in these 6 subjects. Improvement in postural deviations was also observed in all 7 subjects in the second group, which performed stretching exercises. However, compared to the first group, the improvement was significantly less in both functional disorders and balance. Exercise based on developmental kinesiology was evaluated as more effective in positively influencing postural deviations, while stretching was considered a method that is more easily understandable and simpler to perform by children in practice.

Keywords: postural disorders, developmental kinesiology, stretching, balance, young school age