

ABSTRACT

This thesis examines the influence of school and school environment on children's posture. Given the increasing number of children with musculoskeletal problems, poor posture and increased time spent sitting, the aim of this thesis was to find out whether giving children a few extra minutes of daily physical activity and correcting their sitting would improve their posture or at least prevent the progression of poor posture.

The descriptive part of the thesis focuses on school environmental factors such as the height of school furniture and the weight of school bags. The observation took place at the Elementary School in Zvole, involving first-grade pupils. A total of 33 children participated. It was found that 91% of the children carry bags that are too heavy relative to their body weight. The optimal desk height setting according to the ČSN EN 1729-1:2007 standard was appropriate in 52 % of cases. Results from the assessment of proper sitting posture show that none of the pupils in the first class maintained an ideal sitting posture during lessons, with the biggest issue being the correct positioning of the lower body.

The intervention part of the study investigated the impact of sitting posture correction and physical activities on children's posture. A total of 10 children from two first-grade classes were monitored. The students from 1.A served as the control group, while the students from 1.B were part of the experimental group, which began each day with a 3-5 minute exercise session and had their sitting posture monitored throughout the day. Data collection occurred from October 2023 to February 2024.

Results indicated partial improvement in posture in both groups. However, it cannot be concluded whether this improvement was due to the interventions or other factors such as the children's own sports activities or growth. Changes in posture in both groups lacked sufficient statistical significance.

The study suggests that exercise and sitting posture correction may have a positive impact on students' posture. Although improvements were observed, the initial hypotheses cannot be confirmed or refuted due to the lack of data. Further research with a larger sample size is recommended for more accurate conclusions.

Key words: school environment, poor posture, weight of school bags, ideal sitting posture, school furniture, exercise