

## Abstract

The motor skills of children and adolescents declined during the last years. A fifth of the children in primary school fail the cycle proficiency test. This development is explained by decreasing levels of children's physical activity. The use of different modes of transportation on the way to school is characterized by a trend towards passive mobility like motorized individual traffic and public transport. Although active mobility could help in achieving the 60 minutes daily physical activity recommendations from the WHO for children, children are rarely allowed to walk or cycle to school, despite their eagerness to ride their bikes.

This study examines the correlation between bicycling skills of children of the 3rd and 4th school grades and their physical activity levels. The effectiveness of the bicycle training was investigated by a comparison before and after the intervention. These observations are complemented by the evaluation of children's interviews. Additionally, interviews with the parents of the participating children were conducted, to get to know more about the mobility behaviour and physical activity levels. Furthermore, interviews with teachers allowed correlating the school performances of the children with their levels of physical activity.

The analyses show a general tendency of the coherence of bicycle skills and higher physical activity levels. There is a positive correlation by the weekly physical activity level up to ten hours. If there is a higher extent of activity, only low improvements in bicycle skills were found. The before and after comparison shows, that a cycling training with an accompanying mobility workshop can raise the cycle skills of the primary school children significantly. The observations of the bicycle capabilities show, that the children have difficulties at turning left, breaking and manoeuvring through a slalom course. These troubles are characterised by track instability, absence of hand signals and instable rides during the actual turning.