

S18-1: Bikepool – Evaluating and Enhancing a Practice-Based School Cycling Project for Sustainable Health Promotion

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Purpose: Cycling is a highly sustainable mode of transport with well-documented physical and psychosocial health benefits. In school settings, promoting cycling can foster healthy behaviours and environmentally friendly mobility choices among children and adolescents, while also addressing social inequalities in access to active transport. The Bikepool Project, led by the non-profit association Bikepool Hessen e.V., trains teachers to implement safe cycling activities in schools and to integrate the bicycle as a regular means of transport. To investigate the project's public health impact and its potential to contribute to sustainability goals, the project was evaluated regarding: (1) the development of cycling competencies among students, (2) effects on school practices and mobility preferences, and (3) barriers and facilitators for sustainable implementation and growth of the project – especially in socioeconomically and culturally diverse populations.

Methods: A mixed-methods approach was applied to capture both individual and institutional outcomes. The evaluation includes: standardised questionnaires for bikepool coordinators ($n = 160$), teachers trained within the project ($n = 40$), and students ($n = 900$), a motor skills cycling test in a pre-post design ($n = 225$), guided interviews with teachers ($n = 15$), and focus group discussions with students ($n = 25$). Data collection was conducted from February to September 2025.

Results: First insights from the evaluation indicate high acceptance among educators and a strong demand for structural support to embed cycling sustainably in school life. At the same time, schools struggle with competing demands and bikepool activities tend to be carried out less rigorously, if other urgent demands have to be met. On the individual level, students seem to benefit from the activities and show improved skills in biking.

Conclusion: Bikepool demonstrates how a practice-based school intervention can effectively address both health and climate goals by promoting safe, active, and sustainable mobility among children and adolescents. It particularly holds potential for reducing mobility-related health inequalities. The evaluation of the project further highlights key lessons for scaling up such initiatives and integrating sustainability more systematically into school-based health promotion.

