

POSTER: THE INFLUENCE OF SWIMMING & CYCLING ABILITIES ON THE FITNESS OF 9-11 YEAR OLD BOYS AND GIRLS

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Objective: To examine the associations between swimming and cycling abilities and fitness levels in 9-11-year-old boys and girls. **Method:** A cross-sectional study involving 2161 children (50.7% boys; aged 10.52 ± 0.6 years) from 33 schools, participated in the SwanLinx and BridgeLinx health, fitness, and lifestyle programmes between 2013 and 2019. These programmes collected health and fitness data; namely body composition, cardiorespiratory fitness, muscular strength, flexibility, power, speed, and coordination using standard measures from the EuroFit physical fitness test battery. Data relating to swimming and cycling abilities, together with sports club attendance, lifestyle and wellbeing, were collected using an online survey. Multivariate multilevel regressions were used to examine the associations between swimming and cycling abilities and fitness levels, together with gender interactions. **Results:** Intraclass correlations (ICC) showed that schools accounted for between 5.8% and 13.6% of the variance. The ability to swim and cycle was significantly ($p < 0.05$) associated with all components of fitness when accounting for decimal age, body composition, deprivation, gender, "Linx" programme and sports club attendance. In the final model, there were significant interactions between swimming, cycling and gender and cardiorespiratory fitness for both gender by swim ($p < 0.001$) and gender by cycle ($p = 0.014$); while the gender by cycle interaction significantly predicted grip strength ($p < 0.002$). **Implications:** The ability to swim and cycle are important 'milestones' in the journey of motor development and are associated with higher levels of motor fitness. Swimming and cycling should be promoted in children's lifecourse to allow for an optimal development of motor skills, fitness, and health.