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# Modes of transport to or from school and mental well-being of schoolchildren in Ireland

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## Abstract

**Introduction:** Active transport is a priority area within the Physical Activity Strategy for the WHO European Region 2016–2025. Active transport (walking and cycling) is associated with better physical health indicators. Cycling, as a form of moderate-to-vigorous physical activity, has multiple health benefits, including positive impact on mental and social well-being. It remains to be explored whether modes of transport to and from school are associated with indicators of mental health in Irish children.

**Sample and method:** We present analyses of 9,239 schoolchildren from Ireland (mean age: 13.53, SD = 1.92, percentage girls: 52.0%), drawn from the HBSC Ireland 2018 dataset. Scores on the WHO-5 Well-being Index, the Mental Health Inventory five-item version, and self-reported life satisfaction, happiness with self, body dissatisfaction, excellent self-rated health, and multiple health complaints were compared across transport methods. The dependent variables were compared by ANOVA or binary logistic regression controlled for family affluence and area of residence (urban/rural).

**Results:** The modes of transport to and from school were reported as: cycling (3.3%), walking (25.1%), car, motorcycle or moped (private vehicle) (46.3%) and public transport (25.3%). Mode of transport had a significant but weak association with all mental health outcomes. Those who reported walking or using public transport reported poorer mental well-being than those cycling or commuting by private vehicle. Cyclists had significantly better happiness with self and self-reported health than the other three groups. The pattern of the results generally remained robust after controlling for family affluence and area of residence.

**Conclusions:** Children who cycled to/from school have similar mental well-being outcomes to those who used a private vehicle, and reported better happiness with self and self-rated health than all other groups. On most variables, these two groups had more favourable outcomes than those who walked or used public transport, but the effects were weak. Developing cycle-friendly and safe infrastructures, training children in safe cycling, and promoting families cycling might increase the number of children who use bicycles on the way to and from schools, and thus benefit from this form of physical activity.

**Keywords:** Active Transport; Child and adolescent mental well-being; Cycling encourage

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