

Active commuting to school:
habits, level of physical activity and
influences

NSW primary school children, 2002

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Executive Summary

Background

Increasing 'lifestyle' physical activity (PA) among children is recommended to prevent obesity and to establish early healthy habits. Active commuting like walking or cycling to and from schools has been identified as a source of regular moderate-intensity PA and an area for intervention, yet its assessment has not been a focus of PA surveys of children. The prevalence of walking and cycling on school journeys is usually obtained from transportation surveys of people's travel patterns but it does not capture the amount of habitual PA that is associated with travel choices. This document reports travel patterns as a component of PA and identifies influences on habitual travel patterns among school children in NSW and discusses the implications for public health initiatives.

Methods

A computer assisted telephone interview (CATI) survey of parents/carers of randomly selected children aged 5-12 years old was conducted in April 2002 as part of the evaluation of 'Walk Safely to School Day' (WSTSD) campaign in NSW. Parents were asked to describe the modes of commuting on each school trip for a usual week and the travel time by each mode for every trip. An active commuting session was defined as a trip to or from school that involved some walking or cycling whether it was a single mode trip or a 'combined mode' trip. Weekly minutes accrued by active commuting was assessed by calculating the number of sessions and time spent on 'all-way' or 'part-way' walking or cycling trips to or from school.

Results

Overall, 811 parents described the travel modes for 10 school trips representing 8,110 student-trips. Of these, 20.3% were 'walking-only trips', 1.5% were 'cycling-only trips' and 11.5% were a combination of 'part-way walking' and motorised mode. Walking-only trips, ranged from 17.9%-19% during the week mornings to 21.4%- 23.9% during the week afternoons. About one quarter (26%) engaged in 8-10 active commuting sessions during a usual week, 11% did 5-7 active commuting sessions and 8.7% undertook 1-4 sessions per week.

As distance from households to school increase from 0.75 km to 1.5km, the proportion of those doing nil active commuting trips doubled (22.8% to 44.8%) and the proportion of those doing 5 or more active trips dropped by more than one third, from 69.3% to 43.1%. One third of children living between 0-1.5km to school are not doing even one active commuting trip.

The mean weekly time spent in active commuting was low (28.9 minutes, 95% CI; 25.3 – 32.5) due to many students who were not doing even one active trip. However, for 'active commuters' (≥ 1 session) the mean weekly time was 63.4 minutes (95% CI: 57.1 – 69.7) and a quarter of active commuters were doing 1 to 3 hours of walking or cycling per week. The mean weekly minutes accrued by active commuting among older children (11-12 years) was significantly higher than younger children (77.8 vs. 58.2) and the mean weekly minutes accrued by active commuting among boys (68.4) was slightly higher than by girls (58.8). Three out of ten active commuters walk continuously for 10 minutes or more.

Children with a low level of outside school PA (<3 days/week) were 2.08 times (95% CI: 1.25-3.46) more likely to have engaged in 5 or more active commuting sessions than

children who are active outside school (≥ 3 d/wk) after adjusting for all other significant influences. Parents' mode of travel to work, but not employment status, was strongly associated with children's habits; compared with non-working parent, children with a parent actively commutes to work were 1.89 times (95% CI: 1.07-3.73) more likely to do ≥ 8 sessions of active commuting. Children were less likely to do ≥ 5 sessions if their parent believed that their child does not like to walk (OR 0.63, 95% CI: 0.42-0.94). Having a safe route to walk to school, the child's level of independence, and belief in the health benefits of active commuting were strongly associated with sessions of active commuting. Children from Independent (private) schools were less likely to do active commuting trips. The habit of 'car dependency' (≥ 8 car trips) is greater among children living 0.75km to 2.5kms from school.

Implications for public health

This report offers evidence which support the need for a broadening of PA measures, particularly in the measurement of walking as a habitual form of transport to and from school. For greater population impact, the provision of safe routes to walk to school are essential. Health promotion efforts to increase the number of 'walk-only' trips should focus on those who live between 0.76-1.5km and increase the walking distance among older children from 1.5km-2.0km for after school journeys. However, for combined transport policy and health, walking 'part-way' can be promoted from every distance category. Targeting both children and parents active commuting behaviour could increase the number of active trips. Increasing the value of active commuting, as a healthy habit, and the appeal of walking for transport, would encourage parents and children to engage in more active trips.