Walking and cycling to school can increase children’s physical activity and ability to move through their neighbourhood without adult supervision, also known as independent mobility.

Research has shown that physical activity such as walking and cycling has a positive life-long impact on children, including greater cognitive, intellectual and social skills. More specifically, studies have found physical activity increases students’ ability to pay attention, be alert and concentrate in class which in turn enhances academic performance.

Despite such evidence of the benefits walking and cycling can provide, a survey of over 800 primary school students living in six Victorian municipalities revealed only 26 per cent of children regularly walk to school and only five per cent rode their bike to school at least three days in the preceding week. Similarly, a survey of over 500 parents of students aged 5 to 12 years living in the same six Victorian municipalities has revealed that, despite the fact that 56 per cent of children live less than 20 minutes walking distance from their school, over half of them travel by car.

As Australian school children and parents were encouraged to literally join hands in May and participate in Walk Safely to School Day, Catherine Underwood examines some of the perceived barriers and enablers to children’s independent mobility.

Catherine Underwood is a Research Fellow in ACER’s Policy Analysis and Program Evaluation research program.

Encouraging children to walk and ride
Barriers to independent mobility

Concerns about safety are a key factor in whether children travel to school independently. Only 40 per cent of parents living in metropolitan areas and 36 per cent of parents living in regional areas who participated in the survey believe it is safe for children to walk or ride to school on their own. The research also examined survey responses from over 800 residents aged 60 years and over living in the same areas, revealing that older residents believe it is safer for children to walk or cycle to school independently than the parents of primary school-aged children believe to be the case.

In contrast to parents, 79 per cent of older residents living in metropolitan areas and 69 per cent of those living in regional areas believe it is safe for children to walk or ride to school on their own.

The disparity between parents’ and older residents’ views on whether it is safe for children to independently walk or ride through their neighbourhood appears to be reflected in their perceptions of the danger presented to children by strangers.

‘Stranger danger’ was seen as a barrier to children’s independent outdoor activity by 44 per cent of metropolitan older residents and 51 per cent of regional older residents. In contrast, 76 per cent of parents living in metropolitan areas and 71 per cent of parents living in regional areas indicated that ‘stranger danger’ is the most significant barrier to their child’s physical activity in the neighbourhood.

Children are far less concerned about ‘stranger danger’ than parents. Out of around 800 primary school students surveyed, 59 per cent reported they were worried about strangers. Despite these concerns, the majority of children surveyed reported that they would prefer to walk to school rather than be driven.

Parents identified road safety as the second most significant barrier to their child’s physical activity in the neighbourhood. Around half of the parents surveyed (44 per cent of metropolitan parents and 51 per cent of regional parents) agreed that there is a lot of traffic along most nearby streets, making it difficult or unpleasant to go for walks. Here, older residents’ responses were closer to parents’; with 31 per cent of metropolitan older residents and 38 per cent of regional older residents agreeing that heavy traffic makes it difficult or unpleasant to walk.
Knowledge of road safety rules are equally important for children who walk in their neighbourhood as they are for children who ride bicycles. Children who walked or rode their bike to school reported a similarly high level of understanding of the road safety rules irrespective of age. Ninety-one per cent of 8 to 12 year-olds surveyed reported that they own a bike and know how to ride it. Of those that said they know how to ride a bike, 92 per cent of boys and 89 per cent of girls reported that they know the road safety rules.

However, knowing the road safety rules and obeying them are two separate matters. The survey revealed that while boys have slightly greater awareness of road safety rules, girls are more likely to actually obey them.

Girls were more likely than boys to report that they wear a helmet while riding (85 per cent of girls vs. 76 per cent of boys), look right and left before crossing the road (88 per cent vs. 72 per cent) and stop before crossing the road (88 per cent vs. 72 per cent). Girls were less likely than boys to report taking risks such as crossing the road away from the school crossing in order to save time (27 per cent of girls vs. 32 per cent of boys).

Enablers to independent mobility

The surveys asked parents whether their child’s school encourages students to walk or ride to school. Most parents reported that students are encouraged to walk or cycle to school, however less than half said there is a school policy specifically about walking or cycling to school. More than two-thirds of parents said that road safety skills are taught from an early age at their child’s school and more than half said students are taught ‘Bike Education’ including practical riding skills.

The surveys also revealed that the mobile phone may play a role in getting children active in their neighbourhood. Children who know how to use a mobile phone were more likely to move about their neighbourhood without adult supervision than children who do not know how to use a mobile phone.

The study revealed that 70 per cent of children who know how to use a mobile phone reported that they are allowed to go outside and play with other children, compared to only 51 per cent of children who do not know how to use a mobile phone. Children who know how to use a mobile phone also reported a greater awareness of skills needed to move independently around their neighbourhood, such as road safety rules and how to read street signs and use public transport.

The findings support the idea that mobile phones may be a tool parents use to allow their children greater independent mobility.

Another way for parents to facilitate their children’s physical activity within the neighbourhood is through pet ownership. Sixty per cent of children surveyed reported owning a pet dog, of which 64 per cent regularly go on family walks with their dog and 35 per cent regularly walk their dog on their own.

Children who regularly walked their pet dog reported greater awareness of the skills needed to move independently around in their neighbourhood, such as road safety rules. They were also more likely to say they enjoy walking and cycling outside with family and friends, and were less likely to say they enjoy playing inside.

Around 74 per cent of children who walk their pet dog reported being allowed to go outside and play with friends without adult supervision, compared to only 59 per cent of children who do not own a dog. Similarly, parents of children who walk their pet dog were significantly more likely to say it is safe for their children to independently walk, cycle or skate alone during the day; play in the street and local park; travel to places other than school; and cross main roads.

Even if the family dog is not walked by the children, pet ownership can still have a positive impact on children’s lives. The survey showed children who own a pet dog were more likely than children who do not own a dog to own equipment such as bicycles, scooters, rollerblades and skateboards.

In another aspect of the survey, school principals reported that their teachers observed students who actively commuted to school were more physically active in the playground. In the classroom students were more alert, confident, mature, and had higher levels of concentration which all enhance academic performance.

Active modes of transport such as walking, cycling, skating and scooting have been shown to increase children’s knowledge of their neighbourhood and have a positive influence on their health and academic performance and, as such, should be encouraged.

These surveys were based on data looking at children’s independent mobility and active transport collected in 2010 with funding from VicHealth. Further information is available from <research.acer.edu.au/cimat>