

Australian Council for Educational Research (ACER)

ACEReSearch

Children's Independent Mobility and Active
Transport

Policy Analysis and Program Evaluation

5-2012

Children's independent mobility : walking to school and road safety knowledge : 8 to 12 year olds

Catherine Underwood

ACER, catherine.underwood@acer.edu.au

Follow this and additional works at: <https://research.acer.edu.au/cimat>



Part of the [Educational Assessment, Evaluation, and Research Commons](#)

Recommended Citation

Underwood, C. (2012). Children's independent mobility : walking to school and road safety knowledge : 8 to 12 year olds. <https://research.acer.edu.au/cimat/5>

This Article is brought to you by the Policy Analysis and Program Evaluation at ACEReSearch. It has been accepted for inclusion in Children's Independent Mobility and Active Transport by an authorized administrator of ACEReSearch. For more information, please contact repository@acer.edu.au.

Children’s Independent Mobility: Walking to school and road safety knowledge: 8 to 12 year olds

Road safety knowledge is essential for children walking to school so they can safely navigate traffic environments. At the same time walking to school increases children’s awareness of their neighbourhood and also has a positive influence on their health and wellbeing.

According to Zubrick, et al. (2010)¹ physical activity has a positive life-long impact on children. Benefits include overall improved health and well-being, and greater cognitive, intellectual and social skills. Castelli, (2007)² reported physical activity increases students’ cognitive control, or ability to pay attention, which in turn results in better academic performance.

According to Muir et al (2010)³ children represent an important, yet vulnerable road user group. They are pedestrians, cyclists, and users of small wheeled vehicles like skateboards, rollerblades and scooters. According to VicRoads Traffic Safety Education Action Plan (2008-2010)⁴ the early primary school years have been identified as a key time when children’s exposure to the road network as pedestrians increases. Then as students move through primary school to secondary school they progressively start to have greater independence as road users, use a variety of travel modes and have increased exposure to more complex traffic environments.

Studies generally find that students who walk to and from school most days of the week have a higher level of moderate-to-vigorous physical activity (as measured by accelerometer) compared with students who inconsistently walk or travel by car, bus or train.(Sirard et al. (2005)⁵

Timperio et al. (2005) reported, although shops or schools may be within walking distance of most children’s homes, children may not choose to or may not be allowed to walk or cycle to these destinations due to heavy traffic. Dollman and Lewis (2007)⁶ found active travel to school is also associated with active travel to other destinations, making walking or cycling to school indicative of wider use of active travel modes.

The data reported in this snap shot focuses only on children who walk to school. Student’s road safety knowledge is based on students self reports. Students completed a Road Safety Knowledge survey in class.

¹ Zubrick SR, Wood L, Villanueva K, Wood G, Giles-Corti B and Christian H, (2010), Nothing to fear but fear itself: parental fear as a determinant of child physical activity and independent mobility, Victorian Health Promotion Foundation (VicHealth), Melbourne.

² Castelli DM, Hillman CH, Buck SM and Erwin HE, (2007), Physical fitness and academic achievement in third and fifth grade students. *Journal of Sport and Exercise Psychology*, Vol. 29, pp 239-252.

³ Muir, C., Devlin, A., Oxley, A., Kopinathan, C., Charlton, J. and Koppel, S (2010). Parents as Role Models in Road Safety

⁴ Traffic Safety Education: Directions & Action Plan 2008 - 2010 Victoria

http://www.roadsafety.vic.gov.au/files/pdf/trafficsafeteyed_actionplan.pdf. Accessed March, 14, 2012.

⁵ Sirard JR, Riner WF, McIver KL and Pate RR. “Physical Activity and Active Commuting to Elementary School.” *Medicine and Science in Sports and Exercise*, 37(12): 2062–2069, 2005.

⁶ Dollman, J, Lewis, N (2007). Active transport to school as part of a broader habit of walking and cycling among South Australian Youth. *Pediatric Exercise Science* 19(4): 436-43.

Who walks to school ...

Twenty-six per cent of children aged 8 to 12 years reported they regularly walked to school. Of this proportion 58 per cent were girls and 42 per cent were boys⁷. However, only 15 per cent of children reported walking to school five days a week, with nine per cent walking 3 to 4 times a week. Sixty-one per cent reported never walking to school.

I know ...

Children who walk to school show increased levels of skills needed for independence.

	I walk to school	
	Boys	Girls
the road safety rules	94%	91%
how to ride a bicycle	91%	94%
how to read streets signs	87%	94%
how to use a mobile phone	77%	86%
how to use public transport	63%	61%

Children who walk to school show a strong awareness of skills needed to independently move around in their neighbourhood irrespective of gender.

Road safety knowledge ...

Children who walk to school generally showed a high level of understanding road safety rules.

	I walk to school	
	Boys	Girls
I look right and left and listen before crossing the road	77%	81%
I stop before crossing the road	69%	86%
I cross the road next to a parked car	42%	37%
I cross the road away from the school crossing to save time	36%	23%
when the green walking man turns to flashing red I keep walking at a normal pace	64%	38%
when crossing the road at a roundabout, I cross the road about 10 meters or more away from the circle	34%	26%
The safest place to walk is on the footpath	94%	98%
The safest way to cross the road is next to an adult	91%	89%
The most important thing to think about when crossing the road is how far away the car is and how fast it is going	84%	88%

Children tended to show a high level of road safety knowledge. However, boys were more likely to be risk takers.

⁷ The sample comprised 809 students attending 19 Victorian primary schools in Victoria. Students were asked to complete a survey asking them about their independent mobility, active transport, road safety knowledge and their neighbourhood. 504 parents completed a survey about their child's independent mobility, their neighbourhood and barriers to their child's independent mobility. This snap shot uses VicHealth funded research data collected in 2009 and 2010.

With six per cent of the Victorian population aged between 8 and 12 years in 2010 the information obtained from this cohort of students provides a useful picture of children who walk to school and their level of self reported knowledge of road safety.

When I cross a road, I you think I cross it ...

	I walk to school	
	Boys	Girls
less safely than other children	10%	2%
about as safely as other children	47%	61%
more safely than other children	43%	36%

Boys tended to rate their ability to safely cross roads slightly higher than girls. Again, this may reflect increased risk taking.

Parental view: At my child's school ...

	My child walks to school	
	Boy	Girl
there is a crossing supervisor on duty in the morning and afternoon	68%	71%
students are encouraged to walk or cycle to school under adult supervision	56%	45%
students are encouraged to walk or cycle to school	36%	45%
students are encouraged to walk to school with siblings or friends	29%	38%
road safety skills are taught from an early age	25%	29%
parents drive slowly in the vicinity of the school	19%	7%
there is a school policy specifically about walking or cycling to school	18%	26%

Parents who allow their child to walk to school were conscious of safety aspects such as crossing supervisors and road safety skills. Parents were also aware that walking or cycling to school was being encouraged at their child's school.

It is safe for my child to independently ...

Parental belief about the safety of their neighbourhood influences the extent to which they will let their children walk to school.

	My child walks to school	
	Boys	Girls
travel to school	69%	56%
travel to places other than school	46%	26%
cross main roads	35%	19%
Take public transport	14%	12%

Parents tended to be more positive about their sons independently travelling to school and other places.

In our neighbourhood ...

A sense of 'neighbourliness' is important in developing independent mobility among children. When children are allowed to walk independently around in their neighbourhood, they increase their self-confidence, familiarity with neighbours and their sense of belonging.

	My child walks to school	
	Boys	Girls
you often see families out walking or cycling	89%	72%
our family regularly goes on walks together with the pet dog	77%	59%
street crossings are safe for children to use	76%	62%
it is easy to walk, cycle, or scoot to school from our home	72%	53%
there is a lot of traffic along most nearby streets making it difficult or unpleasant to go for walks	59%	55%
it is safe for children to walk, cycle, skate or scoot alone during the day	55%	59%
more children walk to school than are driven	39%	41%
it is much easier to drive to school	14%	30%

Parents' of boys who walked to school tended to have a more positive view than parents' of girls of their neighbourhood as a safe environment for their children to move around.

Children aged 8 to 12 years who regularly walk to school self-reported a good knowledge of road safety skills and road safety awareness. However, boys results tended to suggest they had a higher inclination to be risk takers. Parents who let their children walk to school also demonstrated a positive view of their neighbourhood and confidence in their children to be able to use road safety knowledge.

Contact details for further information

Catherine Underwood
Policy Analysis and Program Evaluation
Australian Council for Educational Research
Email: underwood@acer.edu.au
www.acer.edu.au

Acknowledgement

ACER gratefully acknowledges the funding provided by the Victorian Health Promotion Foundation and the children and parents who participated in the research.