

Children’s Independent Mobility: and the Mobile Phone: 8 to 12 year olds

The mobile phone, once a leader in contributing to sedentary lifestyles, has had a change of heart and may now be getting children mobile in their neighbourhood.

The prevalence of children who are overweight is increasing in importance as a public health issue in Australia. The past two decades have seen a rapid rise in the number of children who are overweight or obese, with no sign that this trajectory will plateau (McCallum & Gerner, 2005)¹. This increase in the proportion of overweight children has been attributed to many factors including increased sedentary lifestyles, increased television viewing, video games, use of computers, the Internet, and less time spent outside playing.

According to Timperio et al. (2005)² neighbourhood factors such as the amount of time spent outside, access to public transport, parks or sports grounds and other facilities, may also be indirect influences on overweight and obesity. 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.

In 2001 the ABS reported that with increased access to the internet and mobile phones, children and adolescents need not even leave the home to maintain contact with their friends³. By 2011 with the growth in technology, mobile phones are becoming increasingly capable of doing much more than just maintaining contact with friends. It can be used to access the Internet, play games and listen to music, providing yet another avenue for children to spend time on screen-based activities ABS (2010)⁴.

On face value, it would appear that the mobile phone plays a significant role in contributing to children having a sedentary lifestyle. However, Brockman et al. (2011)⁵ reported children’s use of mobile phones, when playing away from home, helped to alleviate parents’ safety fears, and so encouraged children’s active play. Mobile phones were used by children to keep in touch with parents when playing outdoors and that, because of this, their parents allowed them greater independent mobility. (In 2009 the ABS reported 83 per cent of children aged 9 to 11 years used a mobile phone to keep in touch with their family, while 13 per cent of children used a mobile phone to contact their friends⁶.)

So, the extent to which children know how to use a mobile phone may impact on their independent mobility in their neighbourhood. While knowing how to use a mobile phone does not necessarily mean a child owns a mobile phone for the purposes of being allowed out into their neighbourhood, it is considered a reasonable proxy for owning a mobile phone.

¹ McCallum, Z. and Gerner, B (2005). Weighty matters: An approach to childhood overweight in general practice. *Australian Family Physician* 34(9), 745-748.

² Timperio, A, Salmon, J, Telford, A and Crawford, D. (2005) Perceptions of local neighbourhood environments and their relationship to childhood overweight and obesity. *International Journal of Obesity* 29, 170–175

³ Australian Bureau of Statistics (2001). Children’s participation in cultural and leisure activities. Australia. ABS. Cat no. 4901.0. Canberra: ABS.

⁴ Australian Bureau of Statistics (2010). Square Eyes and Couch Potatoes Children’s participation in Screen-Based Activities. ABS Cat. no: 4156.0.55.001 - Perspectives on Sport, June 2010, Canberra: ABS.

⁵ Brockman, R, Jago, R and Fox, K. R. (2011) Children’s active play: self-reported motivators, barriers and facilitators. *BMC Public Health*, 11:461.

⁶ Australian Bureau of Statistics (2009), Children’s Participation in Cultural and Leisure Activities. Australia. ABS. Cat no. 4901.0. Canberra: ABS.

Who knows how to use a mobile phone ...

Eighty-four per cent of children aged 8 to 12 years reported they know how to use a mobile phone. Of this proportion 45 per cent were boys and 55 per cent were girls⁷.

I have ...

Physical activity plays a major role in maintaining a healthy body weight.

	I know how to use a mobile phone	
	Yes	No
a bicycle	92%	86%
a scooter	80%	73%
a pet dog	61%	55%
a skateboard	52%	45%
rollerblades	50%	35%

Children who know how to use a mobile phone were more likely to own equipment that enabled them to engage in active transport.

I know ...

Children who can navigate their way around their neighbourhood show increased levels of skills needed for independence.

	I know how to use a mobile phone	
	Yes	No
how to ride a bicycle	96%	82%
how to read streets signs	94%	74%
the road safety rules	91%	88%
I am allowed to go outside and play with other children	70%	51%
how to use public transport	61%	33%

Children who know how to use a mobile phone showed a greater awareness of skills needed to independently move around in their neighbourhood.

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. This snap shot uses VicHealth funded research data collected in 2010.

With six per cent of the Victorian population aged between 8 and 12 years in 2010⁷ the information obtained from this cohort of students provides a useful picture of the impact the mobile phone may be having on children's independent mobility and resultant physical activity.

I know the way to ...

	I know how to use a mobile phone	
	Yes	No
walk or cycle to my school	90%	76%
walk or cycle to the local park or playground	90%	82%
walk or cycle to the local shop	88%	74%
walk or cycle to my best friends house	79%	69%

Children who know how to use a mobile phone were more active and more independently mobile in their neighbourhood.

How much do you enjoy ...

Outdoor play has lots of benefits for children, including increasing their physical exercise and health. It increases their confidence, and provides them with opportunities to meet other children and improve social skills⁸. Students who play outside also develop a familiarity with neighbours and a sense of belonging.

	I know how to use a mobile phone	
	Yes	No
playing outside	85%	75%
going for a walk with family or friends	73%	64%
going to a local park or playground with family or friends	74%	69%
riding a bike	67%	55%
playing inside	59%	78%

Children who know how to use a mobile phone showed a preference for playing outside and participating outside in activities with family members and friends.

I most like going ... with my friends

	I know how to use a mobile phone	
	Yes	No
to the local park or playground	60%	37%
to a friends house	36%	30%
to a sporting club	33%	24%
to school	33%	20%
to the local shops	33%	19%
for a walk with my pet dog	24%	11%
to a local library	20%	12%

Children who know how to use a mobile phone were much more likely to like moving around in their neighbourhood.

⁸ O'Brien, L and Murray, R. 2007. Forest School and its impacts on young children: case studies in Britain. *Urban Forestry and Urban Greening*, 6: 249-265.

Barrier to children's physical activity in the neighbourhood ...

Barriers in the neighbourhood impact on the extent to which children are able to move around in it independently.

	I know how to use a mobile phone	
	Yes	No
I need to cross the road(s) to play at the local park	74%	60%
I am worried about strangers	58%	59%
There are a lot of cars on the road near my house	41%	38%
I am worried about dogs not on leads	28%	39%
There are no children for me to play with near my house	28%	34%

Children who know how to use a mobile phone reported a higher incidence of having to cross road(s) to play at the local park. However, this did not impede them from actively moving around in their neighbourhood.

Travel mode to school ...

Mobile phones made no difference in how children travel to school because 65 per cent of children were driven to school, while 33 per cent walked or rode their bicycle.

	I know how to use a mobile phone	
	Yes	No
Passive mode of transport (i.e. car, bus or taxi)	68%	67%
Active mode of transport (i.e. cycle, skate or scooter)	32%	33%

In summary, children aged 8 to 12 years who know how to use a mobile phone demonstrated a greater participation in active transport and independent mobility in their neighbourhood than their counterparts who reported not knowing how to use a mobile phone. The findings outlined here support the work of Brockman et al (2011) who reported children regularly used mobile phones to keep in touch with their parents when playing outdoors, and because of this, their parents allowed them greater independent mobility.

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