

Children's independent mobility – is it influenced by parents' perceptions of safety?

Findings from the CLAN study

For young people, independent mobility, that is walking or cycling in the neighbourhood without adult supervision, is important for their physical, social, cognitive and emotional development¹⁻³. However, parents may restrict their children's movement around their local neighbourhood due to concerns about safety⁴.

This study sought to understand the factors that influence children's levels of independent mobility in order to inform future strategies for increasing this important health behaviour. In particular it explored how parents' perceptions of safety in their neighbourhood affected children's levels of independent mobility.

Study design and methods

The CLAN study was a longitudinal design involving surveys of parents of children at primary and secondary schools in areas of varying socioeconomic status in metropolitan Melbourne.

The survey, conducted in 2004 and 2006, examined independent mobility among children and adolescents. It also examined associations between independent mobility and parents' perceptions of safety in their neighbourhood.

In 2004, the study involved 484 families with children in grade 3 (younger children) and adolescents in years 7-10. Four hundred and fifty two families were involved in the follow-up survey in 2006, at which time the children were in grade 5 or years 9-12.

What are children's levels of independent mobility and how do they change over time?

Children's levels of mobility were expressed as scores from 0 (no independent mobility) to 4 (highest level of independent mobility). The scores in 2004 are shown in Table 1 together with the difference in scores between 2004 and 2006.

Table 1. Levels of independent mobility in 2004 and change in 2006

	Independent mobility score mean score (SD)	Independent mobility score (zero score) (%)	Change in independent mobility score (score in 2006 minus score 2004)
Younger boys	1.29 (1.36)	41%	1.55 (1.48)
Younger girls	0.82 (1.17)	57%	1.54 (1.46)
Adolescent boys	3.42 (1.00)	3%	0.23 (0.97)
Adolescent girls	2.96 (1.33)	8%	0.34 (1.17)

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Boys had higher levels of independent mobility than girls for all age groups.

Adolescent boys had the highest levels of independent mobility while younger girls had the lowest levels.

Younger children had greater increases in independent mobility than adolescents between 2004 and 2006, reflecting an expected increase in independence associated with the transition to adolescence. The independent mobility of adolescents increased only slightly between 2004 and 2006 suggesting that levels of independent mobility are established by age 13-15 years.

What are parents' perceptions of safety in their neighbourhood?

The study examined parents' perception of road safety as well as general neighbourhood safety such as stranger danger. Overall 50% of parents felt that road safety was a concern in their neighbourhood, whilst 65% felt it was safe for their child to hang out in the street outside their house.

As might be expected, parents of adolescents were less concerned about safety in their neighbourhood, compared to parents of younger children.

How do parents' perceptions of safety affect children's independent mobility?

The study found parents' perceptions of road safety were important for independent mobility among girls in both age-groups, but not for boys. Adolescent girls whose parents considered main roads to be a barrier to walking around the neighbourhood, and who perceived there to be a lack of pedestrian crossings, had less independent mobility than those whose parents did not share these views. However, younger girls whose parents reported that there were traffic calming measures on local streets had greater independent mobility.

In terms of general safety, the perception of the neighbourhood being safe for solitary walking or cycling was associated with greater independent mobility among boys and girls in both age-groups.

Parents' perceptions of safety seem to be particularly influential on independent mobility among adolescent girls. There were lower levels of independent mobility among adolescent girls whose parents were concerned about a broad range of issues including road safety, danger from strangers, trouble-makers hanging around, assault and bullying.

The association with road safety increased as younger children grew older and their independence increased. In particular, the importance of physical infrastructure designed to calm traffic (e.g. speed humps) and to aid pedestrians (e.g. crossings) was associated with increases in younger children's independent mobility over the two-year period. Neighbourhoods with traffic calming features such as speed humps may therefore help to promote independent mobility.

Where to from here?

This research has confirmed parents' perception of safety as an important influence on children's independent mobility. The results may inform urban planners, policy makers and local governments in the development and design of neighbourhoods. In particular it highlights the importance of traffic calming measures and pedestrian crossings in relation to increased independent mobility. It also highlights the importance of general perceptions of neighbourhood safety for walking, cycling or playing, which may be improved through initiatives aimed at fostering social interactions.



References

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