Kids in the City Data Summary for Auckland Council

Introduction

The Kids in the City research has involved 253 children (aged 9-12 years) from nine Auckland schools (eight primary and one intermediate) and their parents/caregivers; nine young local people trained as interviewers; and a team of researchers from Massey University, AUT University and the University of Auckland.

Concerns about decreasing levels of physical activity and independent mobility (unsupervised play and travel) and rising obesity rates amongst New Zealand children, within the context of the residential intensification, were the catalysts for the research. The overarching aim of the research is to provide an evidence base to ensure children’s wellbeing is taken into account in urban policy and planning decisions. Specific research aims have been to assess children’s levels of physical activity and independent mobility and to find out about their neighbourhood experiences and perceptions. We want to understand how features of their neighbourhoods might affect children’s levels of physical activity and independent mobility. Physical activity and independent mobility are important for children’s wellbeing and their cognitive, social and emotional development, as well as their physical development.

The research has involved six suburban primary schools (two in South Auckland, two in East and two in West Auckland) and three inner-city schools (two primary and one intermediate) in neighbourhoods with varying urban design characteristics – housing density, street connectivity, land use mix (such as retail, residential,) and walkable access to a range of community destinations (libraries, parks etc.). The inner city schools are decile 6-9, the suburban West Auckland Schools are decile 4 & 5, and the South and East Auckland schools are decile 1.

The data were collected in 2011 for suburban schools and 2012 for inner-city schools.

Methods

All child participants wore an accelerometer (to measure physical activity) and a GPS unit (to track where they went) over one week during waking hours. They also recorded where they went, how they travelled (walk, bike, car etc.), and who they travelled with, in trip diaries. Researchers visited children at their schools for six consecutive weekdays to collect the GPS, accelerometer and trip diary data.
One hundred of the 160 suburban children and 40 of the 93 inner-city children later took trained local high school student interviewers and/or researchers on go-along neighbourhood walking interviews. On these walks, children talked about where they went in their neighbourhoods, what they liked and disliked, and their safety concerns. Parents of all participating children also took part in a telephone interview. In the last stage of the study, school-based discussion groups were held with suburban (8 groups) and inner-city children (5 groups) and their parents (15 groups across the nine schools).

Some findings

While there were large variations in the neighbourhood experiences of individual children (with some not allowed outside their front gate/apartment foyer without adult supervision and others who were often independently out and about), and some differences according to neighbourhood type, the overall findings show children had quite restricted independent mobility and limited interaction with their neighbourhood environments outside of home and school.

Trip diaries

School was the most frequent destination for all children, followed by retail outlets/shopping centres and sporting venues. For both inner-city and suburban children, more than a third of the trips they reported making (almost 38%) were to and from school.

These trips provided children with the most opportunities for independent mobility. Across the whole sample, 41% of trips to school were made independently (2.07 of 5.03 mean trips per child per week) – with significant inner-city/suburban and West suburban versus South/East suburban differences (see table below).

![Graph: Where kids go: School]

The suburban children made twice as many trips to the shops as inner-city children – with once again differences between the West and South/East suburban children (see table below).
Conversely, inner-city children made four times as many sports-related trips as suburban children in the South and East and twice as many as the suburban children attending schools in the West. Very few of these trips were made by children travelling independently. Trips to formal extra-curricular education activities (e.g., maths tuition) followed a similar pattern.

Of other more frequent destinations, trips made by South and East Auckland suburban children (but not those from West Auckland) were more likely to be to the park and other informal play destinations. More than half of these trips were also made independently by South and East suburban children (see table below).

Friends’ homes and local dairies/convenience stores were the only destinations where more than half the trips made by children were independent (60% and 56% respectively). In terms of other destinations, only 41% of school trips, 23% of shopping trips and 8% of trips to formal sporting activities were made independently (across the whole sample).
Across the nine schools the mean number of trips was 29, with 38% of trips made independently.

**Interviews and discussion groups**

Findings from the interviews and discussion groups clearly show that across the whole sample children’s and parents’ fears were the main factor limiting children’s independent mobility – and ‘stranger danger’ and traffic were the primary fears.

**Children’s perspectives**

A suburban boy talked of not being allowed to play in his street because “someone can like, do something to me...like violence to me”; and another of not being allowed to walk to school without adult supervision because of traffic dangers: “It is really busy around here and like someone is crossing and the cars just speeding and they are like texting on the phone and doing something else they are not supposed to be doing and like they don’t see the person crossing when they are supposed to be crossing, and [there are] accidents and stuff.”

Traffic fears were more prevalent in the inner city and West Auckland neighbourhoods where there were busy arterial routes.

For many children, their sense of safety depended on being close to home and having family nearby. For instance: “I feel really safe and like nothing’s going to happen with my mum next to me”; and another child said he wouldn’t feel safe if he was “like somewhere far, far away from home”. Knowing their neighbourhood and having ‘good neighbours’ also contributed to children’s sense of safety.

In terms of ‘stranger danger’, inner-city children’s fears focussed on the homeless and the ‘weird’ and ‘dodgy’ people; while in the suburbs their fears were more about ‘bad people’, ‘drunk people’ and ‘bullying’ older teenagers. ‘Scary dogs’ were of concern to some children from all suburban schools.

Both parents’ fears for their children’s safety and their children’s own fears meant many children seldom ventured beyond the confines of home, school and the houses of friends and family – especially the children from the two West Auckland schools. Several children from New Lynn Primary School spoke of their fears of strangers and “bad things that happen”. They also talked of the “dangerous” traffic making them feel unsafe.
Children often expressed ambivalence about being out and about without a parent or older sibling. On the one hand was a desire to be more independent; on the other, fear of the possible consequences. Some children’s fears were exacerbated by media reports of violence and several children (both inner-city and suburban) spoke of fears of being ‘captured’, stolen or ‘taken’: “People might capture me, or steal me”; “Someone might like take me away.”

Almost all children liked their home and neighbourhood environment, even if they didn’t like everything about them. In suburban and inner-city areas alike, having friends living close by, places to play and proximity to a range of amenities were features most liked. Children liked playing at home with siblings and friends (both inside and out) and talked of liking their neighbourhoods because they were “nice”, “quiet” and “peaceful”. Parks were the favourite public space mentioned by the greatest number of children. They highlighted proximity to home, play equipment, trees, and having space to run around and play with friends as things they most liked about parks.

Those aspects of neighbourhoods children most disliked included dangerous traffic (inner-city and middle-income suburbs particularly); ‘weird’, homeless and/or drunk people in the inner-city and drunk people in some suburban areas; older youth who were bullying or intimidating (suburban and inner city); and ‘scary’ dogs in the suburbs. Some suburban children also talked of disliking the graffiti and rubbish in their neighbourhoods.

Noise from drunken parties in some suburban neighbourhoods and traffic noise in the inner city which kept children awake at night were also disliked. Conversely, some apartment-dwelling inner-city children disliked having to keep quiet in their apartments to avoid complaints from neighbours; and children didn’t like being told off when they were playing boisterously outside.

Parents’ perspectives

As did their children, most parents liked the neighbourhoods they lived in, although they didn’t like everything about them. Suggestions of measures which could make their neighbourhoods better places for children addressed the two main safety concerns: the dangers of traffic and stranger danger. In terms of traffic, parents’ suggestions included lower speed limits; extending the present 40kms around schools out to a 2 km radius for an hour before and one hour after school; more pedestrian crossings; bike lanes; and wider pavements (which could be shared by pedestrians, scooter-riders and cyclists). In terms of children’s safety from violence and bullying, their suggestions included getting to know neighbours; more community responsibility for children’s safety; greater police presence and security on the streets; better lighting and safer parks.

In the discussion groups parents reflected on how children today were much less free to roam and play outdoors than they themselves had been as children. Reasons they thought this was so included the world being a more dangerous place, with more and faster cars on the road and less social cohesion. They spoke of today’s parents working long hours to make ends meet and therefore being less likely to be out and about in their neighbourhoods or to know their neighbours. Driving their children to most activities exacerbated this (and added to traffic dangers) – and residential mobility also meant they were less likely to know their neighbours. Parents also talked of the pressures of a competitive world meaning their children had less time to just play – and the lure of technology which kept them inside.

Accelerometer data

The accelerometer data (see table below) confirmed that outside of school hours children were engaged in sedentary activities far more often than they were physically active. While the accelerometer information cannot tell us what specific activities children were engaged in while
wearing the units, it does give an accurate representation of the time children spent involved in sedentary activities (sitting, lying down, watching television, etc.), and in light (e.g., walking) and moderate-to-vigorous intensity activity during waking hours each day. High levels of sedentary time were consistently observed, with children spending an average of 6.8 hours per day sedentary (ranging from 6.3 to 7.8 hours per day). However almost all (96%) of the children accumulated a daily average of at least 60 minutes of moderate-to-vigorous physical activity every day – the minimum level recommended for optimal health. The table below shows the average daily percentages of time spent at each activity level for each participating Auckland school (East, 1 & 3; South, 2 & 6; West, 4 & 5; and inner city, 7, 8 & 9).

Overall, activity patterns were relatively similar across schools, with children spending between 56-67% of the time they wore the accelerometers being sedentary, and 13-18% of their time in moderate-to-vigorous activity.

**Dissemination**

Summaries of the findings have been sent to all participating schools. Presentations and discussions with Auckland Council and other government and community organisations are continuing.

For further information please contact:

Karen Witten  
Professor of Public Health  
SHORE and Whariki Research Centre, School of Public Health, Massey University

Ph 366 6136 or 0272802090: k.witten@massey.ac.nz