Learning from success: active travel in schools
INTRODUCTION

The promotion of active travel can be a key part of tackling Glasgow’s poor health record. Shifting from car-based transport to more active modes such as walking and cycling not only increases levels of regular physical activity\(^1\), it can also reduce harm from pollution and make our urban spaces more pleasant to walk in by reducing the fear of accidents\(^2,3\). Furthermore, active travel can help create more resilient cities, better positioned to cope with global challenges such as climate change, and peak oil and fuel security\(^4\).

The Healthy and Sustainable Travel Programme at the Glasgow Centre for Population Health (GCPH) recognises that helping the population become less dependent on car travel requires action across a number of areas; infrastructure, policy and culture all influence our travel behaviour and preferences. In this project, we used the concept of positive deviance (see below) as a tool for exploring an existing example of the kinds of behaviours that represent the change we would like to see: schools where pupil journeys are regularly made by means other than by car. The research asks what can we learn from these examples for the promotion of active travel more broadly?

Positive deviance and active travel to school

The positive deviance approach is based on the observation that “in every community or organisation, there are a few individuals or groups whose uncommon but successful behaviours and strategies have enabled them to find better solutions to problems than neighbours who face the same challenges and barriers and have access to the same resources”\(^5\). Positive deviance therefore encourages the extension of uncommon behaviours to the whole community, to bring about sustainable behavioural change through identification of solutions already happening within the community.

We were interested in exploring an apparent example of positive deviance emerging from routine data. Certain schools in the Greater Glasgow area achieved higher levels of walking or cycling to and from school than would be expected, when taking into account the distance pupils have to travel. Whether this is a consequence of processes at play at the level of the school, the design of the local environment, the individual pupils within the school, the influence of parents or the school catchment area was not known. However, seeing these schools as positively deviant in relation to active travel presented a useful starting point to disentangle the factors shaping and supporting active travel behaviours.
AIMS AND PURPOSE

The GCPH commissioned MVA Consultancy to conduct research to help understand the behaviours and practices that led to higher rates of active travel in schools and to make recommendations to promote the extension of such behaviours. Specific research objectives for the project included:

- identification of what encourages active travel in schools where rates are higher than expected
- exploration of the influence of school-level, compositional (pupil-level) and area-level factors, including school ethos and support, the pupils’ family background and the provision of higher quality or safer active infrastructure in the school catchment area
- production of end-user orientated recommendations focused on learning applicable to the promotion of active travel more widely.

APPROACH AND METHODS

The project had three components:

- a literature review to provide contextual background and shape the methodology and data collection
- qualitative interviews and focus groups with key school staff, pupils and their parents to capture views of the main influencers of school travel mode and choice
- analysis to produce end-user orientated recommendations.

School selection

Eighteen schools (nine primary and nine secondary) from within the Greater Glasgow and Clyde Valley were identified for inclusion in the study. Schools were selected using several criteria:

- a previous identification of schools positively deviant in terms of active travel based on the Sustrans ‘Hands-up’ survey
- a measure of the average pupil ‘active travel distance’ for each school, calculated as the average home-to-school distance multiplied by the proportion of children claiming to travel actively through the ‘Hands-up’ survey
- household car ownership in the area surrounding the school
- a classification of the schools’ current modal share, based on proportions of those travelling actively, by public transport or by car.
Data collection

After seeking ethical approval, in-depth interviews were carried out with headteachers or other nominated staff; focus groups with P7, S2 and S4 pupils (approximately aged 10-11, 11-12 and 14-15 respectively); and pupil interviews with their parents. The topic guide with school staff was designed to explore views of what encourages active travel within their school. The guide was structured around themes of infrastructure, school initiative, resources, culture and attitudes.

Pupil focus groups in each school were designed to be age-appropriate and used interactive material to explore perceptions of what encourages active travel among pupils. Pupil-led interviews with their parents covered the same question and subject matter. Including pupils in the data collection processes provided the advantage of increasing the likelihood of parental views being included, by allowing these parental interviews to fit within existing family routines (that is, without the need for the parents to attend interviews or focus groups).

EXISTING EVIDENCE

The review of previous evidence identified the following factors as influences on decisions to travel actively to school:

- the catchment area of a school which determines the distance pupils had to travel to school
- the socioeconomic composition of the school catchment area and crucially, levels of car ownership
- perceptions of safety, particularly crime and road safety in the area
- the influence of the local built environment in terms of walkability and being able to cycle safely and easily
- parental school choice
- whether parents combined the journey to school with other reasons for travel such as work or shopping
- potentially, the content and number of years a school travel plan has been in place.
FINDINGS FROM PRIMARY DATA COLLECTION

Current travel patterns in participating schools

Primary school pupils who participated in the research travelled actively almost every day, although a small number would be dropped off when the weather was inclement.

Of those who travelled actively to school, walking was the most frequent choice, with cycling much less frequent. While some teachers felt improvement of cycling facilities (good infrastructure, bike storage and so on) would encourage more cycling, among pupils there was little enthusiasm for cycling. Most pupils tended to state that walking was their preferred choice. Average walking time was five to ten minutes, although one primary school pupil reported a walk of half an hour.

Very few of the staff members involved in the research travelled actively to school. Longer travel distances were cited as one reason for this. A school which did not have a car park and had good transport links, however, had a higher number of staff travelling by public transport.

Geography of the area

Primary and secondary teachers, pupils and parents all agreed that the main factors encouraging pupils to walk to school were location and safe walking routes. The majority of schools in the study were situated in residential, self-contained towns, with the school at the heart of the community.

Availability of public transport and resources

In primary schools, staff did not feel the availability of public transport influenced decisions, as average distances travelled did not make public transport advantageous.

Most primary school teachers felt car availability at home had some impact on active travel choices. However, primary pupils themselves were more likely to explain walking or cycling in terms of what they had always done and enjoyed.

Importance of infrastructure and initiatives

Many primary teachers, parents and pupils felt the areas around their school to be safe, particularly if supported by official crossings and patrols. Both secondary and primary pupils could easily identify features which made it easier to travel actively to school: such as cycle paths, traffic lights and ‘lollipop’ crossing patrols. Secondary school pupils demonstrated good awareness of infrastructure issues related to their journey to school, being able to identify specific locations of potential hazards. Parents, in contrast, did not generally identify any particular infrastructure which would encourage active travel. Secondary teachers could recall specific incidents and accidents but did not identify particular ‘black spots’.

This research, in particular the creation of the small area based three-city deprivation index, has allowed identification of communities in Glasgow which, although experienced by Glasgow in relation to two very similar UK cities. Additional explanations for the poor health experienced in Glasgow over and above that explained by its socio-economic profile.

Analyses of historical data suggest it is unlikely that the deprivation profile of Glasgow has changed significantly over the last ten years. Despite this, premature deaths in Glasgow for the period 2003-2007 were more than 30% higher than expected in the age groups relevant to the study and, therefore, an important driver of mortality, it is only one part of a complex picture.

This ‘excess’ mortality was seen across virtually the whole population: all ages (except the very young), both males and females, in deprived and non-deprived neighbourhoods.

The ‘Glasgow Effect’, a term used in recent years to describe the higher levels of mortality and poor health experienced in Glasgow over and above that explained by its socio-economic profile.

The analyses were based on the calculation of a series of standardised mortality ratios (SMRs) for Glasgow relative to Liverpool and Manchester.

The approach taken in this project, therefore, was to investigate this ‘Scottish Effect’ or ‘Glasgow Effect’ by looking in detail at the three cities of Liverpool, Manchester and Glasgow.

This report summarises a range of analyses undertaken to investigate the so-called ‘Glasgow Effect’, a notion reinforced by other recent research showing that mortality in the early 1990s was higher in Scotland than in England and Wales.

In terms of what they had always done and enjoyed.
An interesting question of ‘cause and effect’ is raised here – do some schools have good walking and cycling infrastructure because they have high levels of active travel or vice versa? To what extent does a culture of active travel within a school or its catchment area lead to greater investment in providing and maintaining its active travel infrastructure? Some of the schools in the study were newly built, and issues such as safe pedestrian access had been given consideration in the design process.

**Active travel initiatives**

Some of the primary schools visited had nominated safer routes to school although very few, if any, had identified ‘safer’ cycle routes. All but one of the schools had areas where bicycles could be locked and stored.

The researchers found school travel plans were more likely to be developed and promoted in primary schools than secondary schools. The research could not establish a link between the presence of a school travel plan and positive deviance in the schools. Indeed, there were reports of there being little relationship between active travel initiatives in general and successful outcomes, with the seeds of success being sown within the school and community culture; “there is not a massive need to promote health and wellbeing because it happens anyway” (secondary school teacher). Although in one school, effort had been made to raise awareness of the risks created by parents parking near to the school when dropping off their children.

Parents of primary schools felt that initiatives such as cycle proficiency training, ‘Eco School’ initiatives and ‘Walk to School Week’ were a key part of promoting active travel: “Having done your cycle proficiency makes me feel you are safe and I am more comfortable letting you cycle to school.” (Primary parent). This was in contrast to the situation in secondary schools where pupils, parents and teachers were unable to identify any measures the school took to encourage them to walk or cycle to school. Again, comments around this highlighted the role of broader cultural preferences rather than school-led initiatives; “I don’t think it is something that’s actively promoted within the school; I think it is something that we choose to do.” (Secondary parent).

**Importance of culture and attitude**

**Culture**

For many primary school children, walking and cycling was promoted at school and at home. For secondary school children, local culture and available infrastructure interacted to promote active travel. For example, four of the secondary schools which had an apparent culture of walking were located in self-contained towns with residents perhaps reliant on walking because public transport, including bus and rail, was not as readily available as in urban areas. A teacher in a rural school felt the “countrified” nature of the pupil population meant they were used to outdoor activities and so thought nothing of walking. At another school, the tightly-knit nature of the community meant parents felt it was safe for children to walk to school, perhaps repeating the practices they knew themselves as school pupils.
General attitudes towards active travel
For primary school pupils, there was often enthusiasm for walking or cycling to school as it was seen as a fun, healthy and green thing to do. The economic benefits of active travel were not lost on parents either. Interest in cycling waned as pupils reached secondary school. This was in part due to cycling being seen as ‘un-cool’ by older pupils. However, the increasing focus on peer activity in teenage years could facilitate a push for walking over cycling as a preferred mode choice. In secondary schools, many pupils reported leaving earlier than necessary to give them more time to spend with their friends or visit the shops on the way to school. Others also stated that walking with friends was more appealing than being in a car alone or on an overcrowded bus.

“You get to meet your pals but you wouldn’t if you are run into school, plus you can talk to them for longer instead of just getting dropped at the school and waiting for folk.”

(Secondary pupil)

The opportunity to socialise as a major benefit of children and young people walking was also identified by a parent and hypothesised by a secondary teacher.

The preference for walking and talking on the journey to school shows how, when understood from pupils’ perspectives, the benefits of active travel are as much about what the travel facilitates as the physiological or efficiency-related outcomes. The walk to school is time wrestled from the structures and routines of school and family life, and the slow ‘meander’ consequently gives walking the edge over cycling. Informal peer contact was clearly an important benefit, much more so than for adults who are more likely to choose their modes based on attributes such as journey time and cost. Physical health benefits, reflecting previous findings with adults, tended not to be a primary motivating factor in decisions to travel actively.1

Factors influencing active travel in the positive deviance schools
There was variation in the degrees of school-led promotion of active travel (secondary schools tended not to develop or promote school travel plans) and most secondary teachers reported little need to do so. This finding highlights the role of local cultural and infrastructural influences in mutually reinforcing a norm for active travel. Most secondary teachers felt active travel was supported by the close proximity of pupils’ homes to their school which normalised active preferences. This might suggest that future campaigns should focus on attitudes within wider communities, as well as measures within and around schools.

An important influencing factor for secondary pupils appears to be the establishment of a regular pattern of behaviour in walking to primary school in their younger years, as this walking behaviour seemed to be continued when they progressed to secondary school. There is then a place for school travel plans at primary school while recognising that the community also needs to support active travel.
Car ownership was felt to be an influencing factor by some, but not all, primary school teachers and parents. The main reasons being:

- some parents dropped their child at school on their way to work
- pupils with no access to a car at home had no choice other than to walk or cycle.

**Parental preferences**

Parents of both primary and secondary school pupils tended to cite the health benefits as the main reason for their child walking to school; although some also noted spending time with friends and encouraging responsibility and independence as benefits.

“To help with your personal fitness and so you can meet with your friends before the classroom.”
(Secondary parent)

“You are now 15 and I can trust you to be careful.”
(Secondary parent)

“It gives me flexibility in that I can stay on at work and you can walk home yourself and use your own key and let yourself in.”
(Secondary parent)

**CONCLUSIONS**

- The factors influencing active travel in positive deviance schools were largely consistent with those identified in the wider literature, however a role for local cultures supportive and encouraging of walking and cycling as mode preferences also emerged from the data.
- An important influencing factor on active travel was the proximity of schools to pupils’ homes, so that they were within walking or cycling distance.
- However a number of other issues also clearly had an impact and were seen as important to pupils and parents, these were:
  - in primary schools there was a degree of proactive promotion and encouragement of active travel including participation in a variety of national, local authority and individual school level initiatives
  - the attitudes of parents and the local community are important and need to be considered in parallel with school-based initiatives
infrastructure, particularly supervised crossings, were identified by school staff and parents as facilitating cycling and walking. Most positive deviance schools within the research also appeared to have relatively safe routes to school.

- Secondary schools showed little evidence of being proactive in initiatives to promote active travel, relying on behaviours established prior to arrival at secondary school.
- In general, secondary pupils had a negative attitude towards cycling preferring the social benefits and opportunities afforded by walking to school.
- Parents in the positive deviance schools had few concerns about the personal safety of children and young people travelling to schools. This suggests that the environment around the schools was not considered risky in these communities and that the local community’s understanding of the risks associated with walking may vary in accordance with histories of walking to school, that serve to normalise the activity. Parents also valued the journey to school as an opportunity for young people to practise independence that would not be achieved if they were taken to school by car.

**RECOMMENDATIONS FOR INCREASING ACTIVE TRAVEL MORE WIDELY**

- The distance between the home and school is a key factor affecting walking and cycling to school. Policies which promote increased travel distances should be discouraged as they should be understood as having the potential to affect health through reducing levels of active travel.
- Well-planned infrastructure which can facilitate safe and pleasant active journeys to school can facilitate positive travel choices. Urban planning and design that structures car use into pupils’ mode choices, such as building housing in car-dependent/car-friendly locations or reducing affordability or access to public transport, should also be discouraged in the promotion of health gain.
- It is key that schools continue to embrace a range of initiatives that encourage and facilitate active travel, enthusiasm and acceptance of walking or cycling in the community more widely. The attitudes of parents and other community members are as crucial as those within schools. School travel plans could consider engaging the broader community to normalise active travel locally. Raising awareness of the range of health, social and environmental issues related to travel through the curriculum could also be a means of promoting preferences for active travel.
The health benefits of walking and cycling should continue to be promoted, however social and wellbeing benefits and the opportunity to practise independence and responsibility also appeared as key drivers of active travel for both children and parents alike.

Walking appears to have greater potential with secondary school pupils than cycling, linked to the social benefits noted above. For this age group active travel encouragement should start by focusing on the short ‘walkable distance’ trips and avoid alienating older pupils through an emphasis on cycling, perceived as providing little social benefit.
Investigating a ‘Glasgow Effect’: why do equally deprived UK cities experience higher levels of mortality?

The Edinburgh: Scottish Executive; 2005.

The link between socio-economic circumstances and health is well established. However, socio-economic factors is less clear. Historically, Scotland’s unenviable position in being what


Department for Transport. Levels of activity relating to school travel plans and initiatives. Available at: http://www.dft.gov.uk/pgr/sustainable/schooltravel/research/levelsofactivityrelatingtosc5753


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Investigating a ‘Glasgow Effect’: why do equally deprived UK cities experience different health outcomes?

David Walsh
Glasgow Centre for Population Health
House 6, 94 Elmbank Street
Glasgow G2 4DL
Tel: +44 (0)141 287 6742
Email: david.walsh@drs.glasgow.gov.uk
Web: www.gcph.co.uk

CONTACT

Pete Seaman
Public Health Research Specialist
Glasgow Centre for Population Health
1st Floor, House 6
94 Elmbank Street
Glasgow G2 4DL, UK
Email: pete.seaman@drs.glasgow.gov.uk
Web: www.gcph.co.uk

MVA Consultancy
Web: www.mvaconsultancy.com