

Supporting physical activity in schools

Findings from the SPEEDY study

CEDAR

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A UKCRC Public Health Research Centre of Excellence

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Being physically active is good for children's health and wellbeing, and can be an important part of combating obesity. However, many children in the UK are not meeting the current physical activity guidelines. As children spend a large amount of time at school or travelling to and from school, this provides opportunities for us to promote a physically active lifestyle.

What we know about physical activity and school

Behaviours formed in childhood and adolescence have the potential to influence adult behaviours and health.

Current guidelines for children aged 5-18 years recommend 60 minutes of physical activity on each day of the week, as well as reducing time spent sitting. The benefits of physical activity for children include:

- better motor skills
- improved physical and mental health
- lower obesity risk.

We know broadly that a child's physical activity behaviour is influenced by their social and physical environment. However, relatively little is known about which specific factors influence physical activity and which are most important.

What CEDAR research is adding



SPEEDY (Sport, Physical activity and Eating behaviour: Environmental Determinants in Young people) is a large study in primary school children in Norfolk funded by the National Prevention Research Initiative and the Medical Research Council.

It aims to help us understand what influences children's physical activity behaviours and how these behaviours change over time.

The study is still ongoing but findings of this study already include a number of insights.

Declining physical activity

Year 5 children (aged 9-10) studied were active for an average of 74 minutes per day, with 69% meeting current guidelines. One year later this dropped by 3 minutes, with only 65% of children meeting guidelines. This trend could result in a 20-minute reduction in physical activity between the ages of 10 and 17 years.

Reasons for this decline are not yet clear, but it does tell us that this may be an important time to support children in maintaining their activity levels.

In the study, children's physical activity did not change much during lesson times. The decrease happened mainly in children's free time, such as during breaks, after school and at weekends.

Break time and school facilities

Physical activity in break times was greater where schools had more fixed sports and play facilities, such as climbing frames, marked playgrounds etc.

However, children encouraged to play outside during break times on wet weather days were actually *less* active at these times than children allowed to play active games indoors, spending on average 9.8 minutes less on activity during their lunch time.



Brief in brief

- 69% of Year 5 children taking part in the SPEEDY study were meeting current guidelines, but this declined between school years 5 and 6. This could lead to a 20-minute reduction in activity by the time they leave school.
- Schools, communities and parents all have a role in helping children stay active.
- Playgrounds with good quality sports and play facilities encourage physical activity. However, on wet days children encouraged to play outside are less active during breaks than those allowed to pursue active games indoors.
- Creating a supportive environment for walking and cycling to school could have positive effects on overall levels of physical activity.

Travelling to school

45.7% of children in the study walked or cycled to school. These children were more physically active overall, indicating that children do not 'compensate' for more activity during travel by being more inactive at other times.

Distance to school is a key predictor of children's active travel, with children living closer being more likely to walk or cycle to school. However, 30% of children living within 2km from school were driven to school.

Social, environmental and school characteristics all influence whether children walk or cycle to school. Influences identified by SPEEDY include:

- attitudes of their parents towards active travel
- support from their peers
- socioeconomic status
- presence of a main road on the route to school.

Factors related to the school environment that support active travel include:

- lollipop people (crossing guards for schools)
- walking buses
- cycle racks in schools.

85% of schools in the study have cycle parking. Only 40% have a lollipop person.

Policy implications

- Late primary school (Year 5 onwards) may be an important period to intervene to support activity levels in children.
- Supporting children to be active during free play and outside of school is important in maintaining their activity levels.
- 88% of schools have policies on physical activity or active travel, but there is still limited evidence that this alone is enough to increase overall physical activity. It is important for schools to actively implement and evaluate plans to enable ongoing improvements in policy and practice.
- Encouraging children to walk or cycle to school may be a good way of increasing their activity levels. Children living further away could be encouraged to walk or cycle at least part of their journey.
- Children need to be provided with opportunities and encouraged to be physically active during break times - indoors as well as outdoors.



What is CEDAR?

The Centre for Diet and Activity Research is studying the factors that influence dietary and activity related behaviours, developing and evaluating interventions, and helping shape public health practice and policy. CEDAR draws on the expertise of a wide range of scientific disciplines, including behavioural science, biostatistics, epidemiology, health geography, health economics and human nutrition research.

Key references and resources

- The SPEEDY study was funded by the National Prevention Research Initiative and the Medical Research Council. A full reference list for this Evidence Brief can be found at www.cedar.iph.cam.ac.uk/resources/evidence
- NICE Guidance for Physical Activity in Children 2009 at www.nice.org.uk/PH17 Chief Medical Officers' physical activity guidelines for young people 2011 at www.nhs.uk/Livewell/fitness/Pages/physical-activity-guidelines-for-young-people.aspx
- Useful resources and more about how CEDAR is working in public health practice and policy at www.cedar.iph.cam.ac.uk/resources



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