



**To:** Place Directorate

**From:** Adrian Davis

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**Subject:** Essential Evidence on a page: No.120 Effects of a cycle training course on children's cycling skills and cycle use

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Top line: Cycle training is valuable in terms of cycling safety skills. However, other strategies are needed when promoting cycling to school such as that any training should focus more on real cycling experiences, so that children are able to deal with traffic on school journeys, and on providing educational support to ensure safe journeys to school.

For most children, bicycles are the most important means of transport as they make it possible to cover greater distances independently. Moreover, bicycles are also used to a great extent in play activities. Children who cycle, however, expose themselves to risks, as can be seen from a number of studies investigating bicycle-related accidents. Nine to 12 year-olds especially who have been found to represent a critical age group for cycling accidents.

Since the ability of children to cycle safely and to perform good cycling skills plays an important role in bicycle-related accidents, various cycle training courses have been introduced. While cycle training was introduced to make child cyclists safer, it is often used as a strategy to promote cycling. However, only a few studies have evaluated the effect of cycle training on cycling to school levels. Parental attitudes and perceptions towards cycling have also been found to play a crucial role in deciding their children's mode choice to school. For example, researchers have found that children whose parents had a positive attitude towards cycling to school had a decreased likelihood of never cycling to school.<sup>1</sup> Consequently, shifting parental attitudes to be more favourable towards their child's walking and cycling to school seems important when promoting walking or cycling to school. Therefore, some initiatives promoting active travel to school involved parents.

In a random sample 3 primary schools in Flanders, Belgium, took part in a study to ascertain the effects of training on cycling skills and cycling to school. Each school was further randomly assigned to one of three conditions. In the first condition only children were involved, with 13 basic cycling skills tested although they did not cycle in traffic.<sup>2</sup> In the second condition both children and their parents were involved. The third condition was the control, where no intervention was provided. Study outcomes were assessed prior to the intervention, within 1 week after the last session, and at 5 months follow-up. The cycle training course of four sessions once a week was effective in improving children's cycling skills. These improvements were maintained 5 months later. However, this study also showed that a cycle training course was not effective in increasing children's cycling to school levels. It appears that improving cycling skills and changing cycling behaviour are two very different concepts, requiring a different approach. In addition, even with parental buy-in, no increase in cycling to school occurred. The researchers concluded that schools should be made aware that cycle training is valuable in terms of cycling safety but that other strategies are needed when promoting cycling to school.

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<sup>1</sup> Ducheyne, F., De Bourdeaudhuij, I., Lenior, M., Spittaels, H., Cardon, G., 2012 Children's cycling skills: development of a test and determination of individual and environmental correlates. *Accident, Analysis and Prevention*, 50, 688–697.

<sup>2</sup> Ducheyne, F., De Bourdeaudhuij, I., Lenior, M., Cardon, G., 2014 Effects of a cycle training course on children's cycling skills and levels of cycling to school, *Accident, Analysis and Prevention*, 567, 49-60.