



## Critical environmental factors of transportation cycling in children: a qualitative study using bike-along interviews

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### INTRODUCTION

Environmental factors are found to influence transport-related physical activity, but have rarely been studied in relation with cycling for transport among 10-12 year old children. The current qualitative study used bike-along interviews with children and their parents to allow discussion of detailed environmental factors that may influence children's cycling for transport, while cycling in the participants' neighborhood.

### AIM

To identify detailed, context-specific environmental factors related to cycling for transport among primary school aged children (10-12 year) and their parents,

### METHODS

Purposeful convenience sample was used to recruit 35 children and one of their parents residing in (semi-) urban areas. All participants were visited at home.



#### *Bike-along interviews*

The parent, child and the researcher made a 30 minutes cycling trip to a destination (e.g. a friends' house, a sports club). Participants were asked to *describe which factors facilitated or inhibited their (child's) cycling during the cycle trip*. Participants wore a GoPro camera on their helmet, which allowed to record video (i.e. the encountered environment) and audio (i.e. corresponding comments of parent and child) during the cycle trip to the destination.

#### *Data analysis*

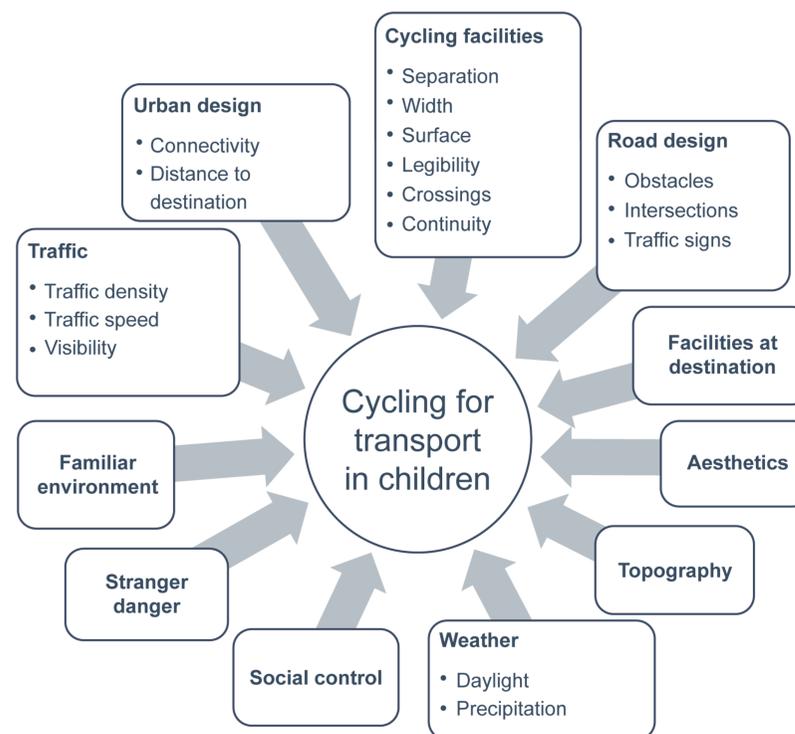
Data obtained from the interviews were audio-taped and transcribed afterwards. Data analysis was guided by grounded theory. The final categories were created by grouping subcategories according to the terminology used in the WHO definition of environment\*.

### RESULTS

Three main categories were identified according to the WHO definition: the physical environment, the natural environment and the social environment.

For example, a mother talks about the physical characteristics of the cycle path:

*"Here the cycle path is easy, beautiful and well-separated from the motorway. So it is quite safe to cycle with kids. The cycle path is fairly new and is very easy to use. We actually use it several times a day."*



### CONCLUSION

Road safety is of major parental concern in this 10–12 yr old study population. Bike-along interviews were able to identify new, detailed and context-specific physical environmental (i.e. visibility, characteristics of cycle infrastructure) factors which could inform policy makers to promote children's cycling for transport. However, future studies should investigate whether hypothetical changes to such micro-environmental features influence perceptions of safety and if this in turn could lead to changes in children's cycling for transport.

#### REFERENCE

\* World Health Organization (2006) Preventing disease through healthy environments: Towards an estimate of the environmental burden of disease