

# More intersections mean less outdoor activity for children

October 11 2011

---

High intersection density and well-connected streets in towns and cities may discourage children from being active and exercising outdoors, according to a Queen's University study.

"We've known for a while that high street connectivity—well-connected streets and a high density of intersections in a given area—helps adults stay physically active since it makes it easier and more efficient for them to walk to work or a local store," says Graham Mecedry, the lead researcher and a graduate student in the Department of Community Health and Epidemiology. "However, our findings suggest that high street connectivity has the opposite effect on children's physical activity."

By mapping physical activity results from the 2006 Canadian Health Behaviour in School-aged Children Survey (HBSC) onto street data provided by a geographical information system, the team found that youth aged 11 to 16 years who live in neighbourhoods with streets that are well connected tend to have lower physical activity levels than youth who live in neighbourhoods with streets that are modestly or poorly connected.

"Playing street hockey is an example of how street connectivity and density can influence the physical activity of youth," says Mr. Mecedry. "When traffic increases, or when you don't have access to a quiet cul-de-sac, the game and the associated physical activity may both disappear."

A follow-up study by the same team indicates that while low street connectivity increases children's activity levels, it also results in an increase in minor physical injuries related to bicycle mishaps. The researchers believe that safety initiatives for bicycle use and street designs that encourage bicycle and car separation can help mitigate these incidents.

The team hopes that the findings from both studies will help inform urban and public health policies to improve [physical activity](#) among Canadian [children](#).

**More information:** The results were recently published in the *International Journal of Environmental Research and Public Health and Injury Prevention*.

Provided by Queen's University

Citation: More intersections mean less outdoor activity for children (2011, October 11) retrieved 24 April 2024 from <https://medicalxpress.com/news/2011-10-intersections-outdoor-children.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--