Is Active School Transport Sustainable in a Northern, Rural Environment? Exploring Child and Parent Perspectives on Facilitators and Barriers.

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BACKGROUND

- Only 25% of Canadian children use active transportation to school (ATS) compared to > 50% a generation ago (1, 2).
- 9% of boys and 4% of girls accumulate the recommended levels of physical activity (PA) per day (3).
- Rates of PA are lower among northern & rural youth compared to urban youth (4).
- ATS can be a conduit for increasing PA among children and youth (5), but research on ATS in this population is limited to large urban and suburban areas.



- "It's scary as a parent to watch your kids walk and watch people fly down Pearce St. at 50+km/hr." (VMP-2)
- * "...I worry about bears too... We have seen bears... I called the secretary because the bear kind of ran up toward the school." (VMP-3)

PRACTICE & POLICY

- There is a need for key stakeholders to continue engaging in partnerships to address key factors deterring parents from allowing their children to engage in ATS.
- Despite short-term ATS interventions, parents and students feel safeguards are not in place.
- Until ATS investors work collaboratively, elementary school-based initiatives to promote ATS are likely to have minimal long-term impact.

There is also a lack of literature on intrapersonal (e.g. students attitudes and beliefs) factors.

PURPOSE

To explore perceptions, facilitators & barriers to ATS among children and parents.



METHODS

 Setting
Small city (population 54,000) in rural Northeastern Ontario, Canada.



- "The sidewalk for me is the biggest concern. When they can be picked up and taken along the way, hit by a car, there are so many things. And particularly because we don't have sidewalks. So if there were sidewalks I think I'd feel a million times better about letting him go on his own." (VMP-5)
- "There's no signage and cars park across the access to the trail as you have to cross Olive Street with no crosswalk and no markings. So the city infrastructure is a real disincentive." (AP-3)





CONCLUSIONS

- Safety is the biggest concern for parents and students.
- Benefits of and barriers to ATS in the rural north are similar to larger urban centers.
- Safety issues related to wild animals along routes to school and a lack of sidewalks are distinct barriers.

REFERENCES

1. Stone, M.R., G. Mammen, and G. Faulkner, *Canadian School Travel Planning Intervention Results*, 2012, Canadian Partnership

Participants and Procedures

Students:

- Two focus groups were conducted with 14 students (Mage 10.6 ± 0.75 yrs; 7 male, 7 female) from two schools engaged in ATS initiatives.
- A semi-structured interview guide elicited information related to ATS attitudes and beliefs and perceived barriers and facilitators to ATS.

Parents:

One-on-one interviews with parents (N=15) were based on items from the Modified Active PASS (Physically Active School Settings) Survey (6).

Data Analysis

Data were reviewed by three members of the research team and analyzed using content analysis (7). Categories were identified and clustered into themes (8).



- * "When you're walking from school or stuff or if you're biking there's no sidewalks so you're mostly on the road for the whole time...They're [vehicles] just going fast and they don't look when you're walking across...and some people are going too fast they almost hit me." (VMC-5)
- "You get to be with friends and it's more fun than sitting on the bus because on the bus all you're doing is talking and you're not even doing anything." (VMC-5)
- If I did bike it'd be better because I'd get fresh air, I'd get exercise and I wouldn't get a headache on my loud bus." (AC-8)
- * "Maybe some more signs, like signs on the road because all there is are stop signs...maybe some slow down signs or something" (VMC-2)
- "...Maybe have an assembly or something to inform everyone and then organize like parents if they want to help out and get people in their area and travel together to school and meeting each other." (AC-6)
- "…some people actually can walk and bike to school but they choose not to because it's quicker to drive or something and if we did that like once a week and everyone has a meeting spot it would probably encourage people to do it because their friends are doing it. (VMC-2)



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2. Canadian Fitness & Lifestyle Research Institute, Transportation among children and youth, in 2010 Physical Activity Monitor 2011, Canadian Fitness & Lifestyle Research Institute: Ottawa, ON. 3. Colley, R.C., et al., *Physical activity of Canadian children and* youth: accelerometer results from the 2007 to 2009 Canadian Health Measures Survey. Health Reports, 2011. 22(1): p. 15-23. 4. Comte, M., et al., Patterns of weekday and weekend physical activity in youth in 2 Canadian provinces. Applied Physiology, Nutrition, and Metabolism, 2013. 38(2): p. 115-119. 5. Faulkner, G.E.J., et al., Active school transport, physical activity levels and body weight of children and youth: A systematic review. Preventive Medicine, 2009. 48(1): p. 3-8. 6. Rickwood, G., V. Temple, and J. Meldrum, *The reliability and* validity of a school-based physical activity survey. Physical and Health Education Academic Journal, 2011. 2. 7. Patton, M.Q., *Qualitative Research & Evaluation Methods*. 3rd Ed 2002, Thousand Oaks: Sage Publications. 8. Merriam, S., *Qualitative research in practice: Examples for*

discussion and analysis 2002, San Francisco: Jossey-Bass.

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