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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.
- 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.

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).

RESULTS

Parental Factors

- **Safety Issues**
  - "It’s scary as a parent to watch your kids walk and watch people fly down Pearce St. at 50+km/hr." (VMC-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)
  - "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)

- **Built Environment**
  - "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)

- **Safety Knowledge**
  - "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)

- **Student Factors**
  - "...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)

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.

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

2. Canadian Fitness & Lifestyle Research Institute, Transportation among children and youth, in 2010 Physical Activity Monitor 2011, Canadian Fitness & Lifestyle Research Institute: Ottawa, ON.

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BACKGROUND

- In Canada, over 90% of children and youth are insufficiently active (1, 2).
- Active transportation to school (ATS) can provide an important source of PA (3), however there has been a consistent decline in the prevalence of ATS (4).
- In Canada, only 25-35% of Canadian youth engage in ATS (5), and most research has focused on walking with less attention given to cycling.
- Cycling to school provides similar health benefits and enables ATS from further distances, but faces certain barriers such as lack of proper bike/road safety training and parental perceptions of safety risks.

PURPOSE

- To examine the impact of a week-long cycling education and encouragement initiative on ATS of elementary students.

SETTING

- An elementary school from Junior Kindergarten to Grade 6, in a small city in Northeastern Ontario, Canada (population 54,000).
- The school was engaged in a School Travel Planning (STP) process with the local public health unit. Previous STP family surveys reported on parental perceptions of their children cycling to school.

METHODS

- **Bike Week Activities**
  - Students from Grades 1 to 6 participated in a week-long cycling education program offered during physical education classes.
  - Cycling education included road safety skills (e.g. rules of the road, road signs), helmet fitting and handling skills (e.g. straight line riding, arm signals).
  - The week-long event culminated in a bike rodeo.

- **Participants and Procedures**
  - Students (N=341) from Grades 1-6 participated in a valid and reliable hands-up survey (6) to determine travel mode to school.
  - Surveys were conducted over three consecutive days, and the results from the three days were averaged.
  - Data were collected in April 2016 (pre-initiative) and June 2016 (the week following the initiative).

- **Data Analysis**
  - A paired sample t-test was used to determine change in cycling to school over time.

RESULTS

- There was a significant increase (p<0.004) in cycling to school post-initiative (4%) compared to pre-initiative (1%).
- A greater increase in cycling to school was noted among students in grades 4, 5 and 6.

REFERENCES

Exploring parental perceptions of a walking school bus in northern Ontario

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BACKGROUND

- Currently, only 26% of Canadian children and youth use active modes of transportation to and from school (1).
- Increased vehicle dependency results in a loss of independence, road-based skills, social interaction and physical activity (PA) (2).
- The decline in walking to school may reflect increased parental concern about child safety and security (3).
- In order to increase active transportation to school (ATS), methods such as a walking-school bus (WSB) have been proposed as a safe, active way to travel to school (4).
- While we have an understanding of parent decision making in larger urban centres (5), little is known about what influences parent decision making in regards to child WSB participation in other contexts.

PURPOSE

- To explore parental perceptions of a WSB and to describe and explore barriers and facilitators relative to a WSB in a northern context.

METHODS

Setting

Three elementary schools located in two communities in northeastern Ontario, Canada (populations 54,000 and 5,800).

Participants and Procedures

Parents of elementary school students (N=16) participated in semi-structured interviews guided by a social marketing approach.

Data Analysis

- Inductive and deductive analyses were used to identify emerging themes (6).
- A second deductive analysis was conducted to further identify barriers and facilitators to a WSB.

RESULTS

Demographics

- 66% of respondents lived > 3.0 km from school, 23% between 1.6 and 3.0 km, and 11% < 1.6km.
- 44% of parents report their children take the bus, 31% were driven to school.
- 66% of respondents lived > 3.0 km from school, 23% between 1.6 and 3.0 km, and 11% < 1.6km.

Benefits of a WSB

- “I love the idea, I guess. Activity for the kids, getting them moving, getting some of that energy out before they start their school day and have to sit at their desks for a long period of time.” (SCF2)
- “Probably some good conversations, they can walk to school happy together.” (SCF5)
- “I think that it is a good way to make sure that our kids are safe walking on their own until they are old enough to be able to do it completely by themselves.” (SCF1)

Parent Concerns

- “I’m a little fearful with volunteer adults leading the group, like what if someone doesn’t show up for their volunteer work that day.” (SAF1)
- “I guess timing, it depends on what time they’re going by the house and weather, if it’s -30 C I’m not gonna let the kids walk to school.” (SCF4)
- “Like, on my side of the school, there’s not much room at all for that kind of traffic. So if you have people walking, you know an adult, and maybe two kids wide behind them. It could be a bit of a concern, a bit of an issue.” (SCF1)

Logistics

- “Other than just our situation of our distance, but say we lived closer absolutely he’d be doing it.” (SBF3)
- “The other thing is like, I think in the back of my mind there are no sidewalks. There are absolutely no sidewalks where we live.” (SBF3)

Awareness

- “I’m not sure, I guess some kind of like get active initiatives.” (SCF2)
- “I think, social media really. Like the school has a website, the school has a Facebook page, the school sends out school wide emails all the time.” (SAF3)
- “Possibly creating a Facebook account. Like a Facebook site or something about the walking school bus.” (SAM1)

CONCLUSIONS

- The findings suggest that parental concerns regarding a WSB are similar to those of parents in more urban settings.
- Parents had strong concerns related to a lack of sidewalks and extreme amounts of snow experienced in northern Ontario.
- In order to diminish car dependence and encourage WSB uptake, messages that allay parent perceived barriers should be favoured.
- Findings from this study have been used to develop a messaging strategy to promote the WSB at participating schools.

IMPLICATIONS

- Promoting the WSB as a safe, reliable method of transportation might most appeal to parents.
- A WSB is an easy, enjoyable way to engage in PA and an excellent opportunity to foster positive social interactions with other children living nearby.
- Promoting awareness of the WSB through both electronic and paper platforms may have the greatest reach.
- A WSB may be a way to teach children how to safely walk to school in a supervised manner until they are old enough to walk alone.

REFERENCES