

Active school travel



Guy Faulkner

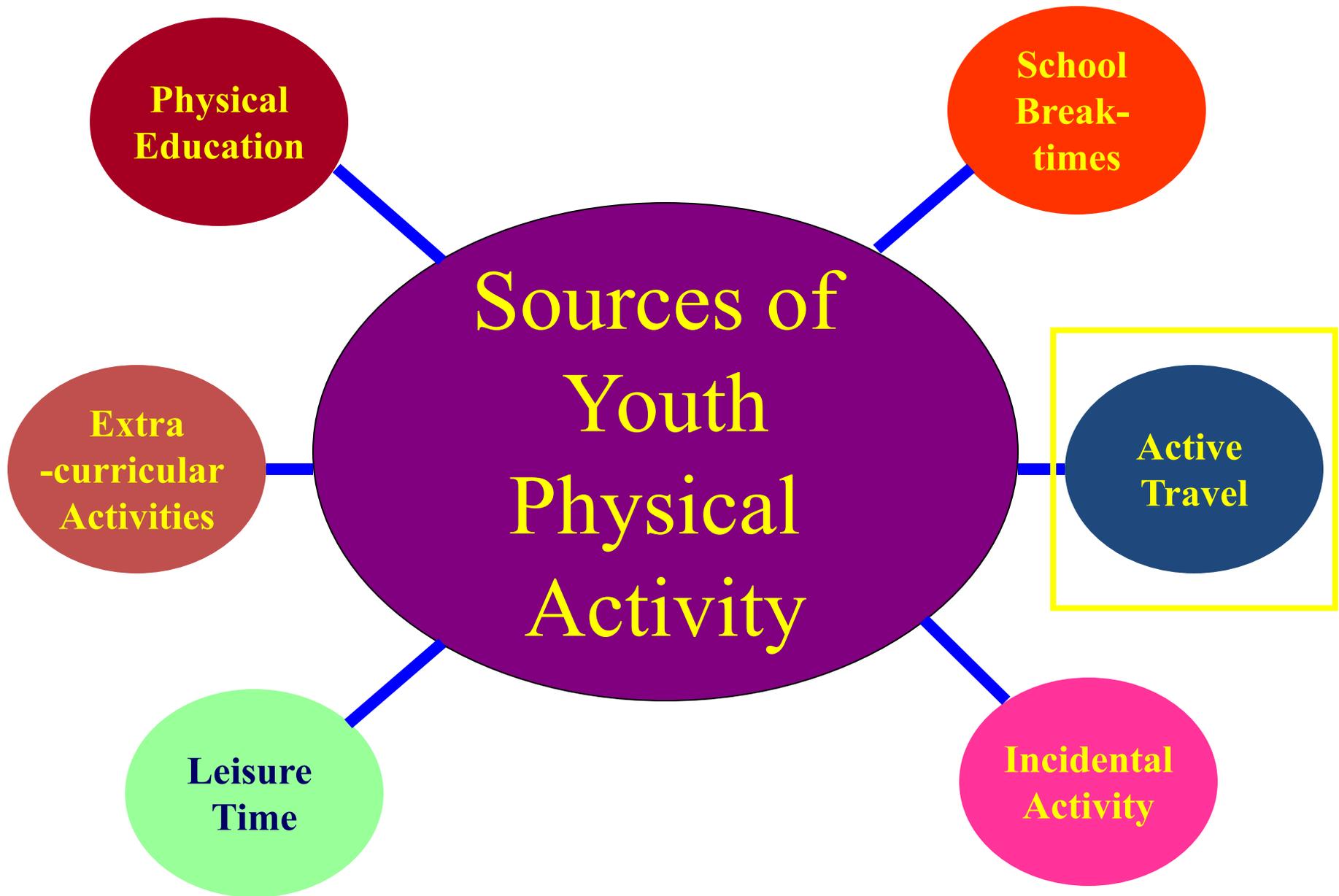
Chair in Applied Public Health

School of Kinesiology



a place of mind

THE UNIVERSITY OF BRITISH COLUMBIA



Active School Transport

- A source of physical activity

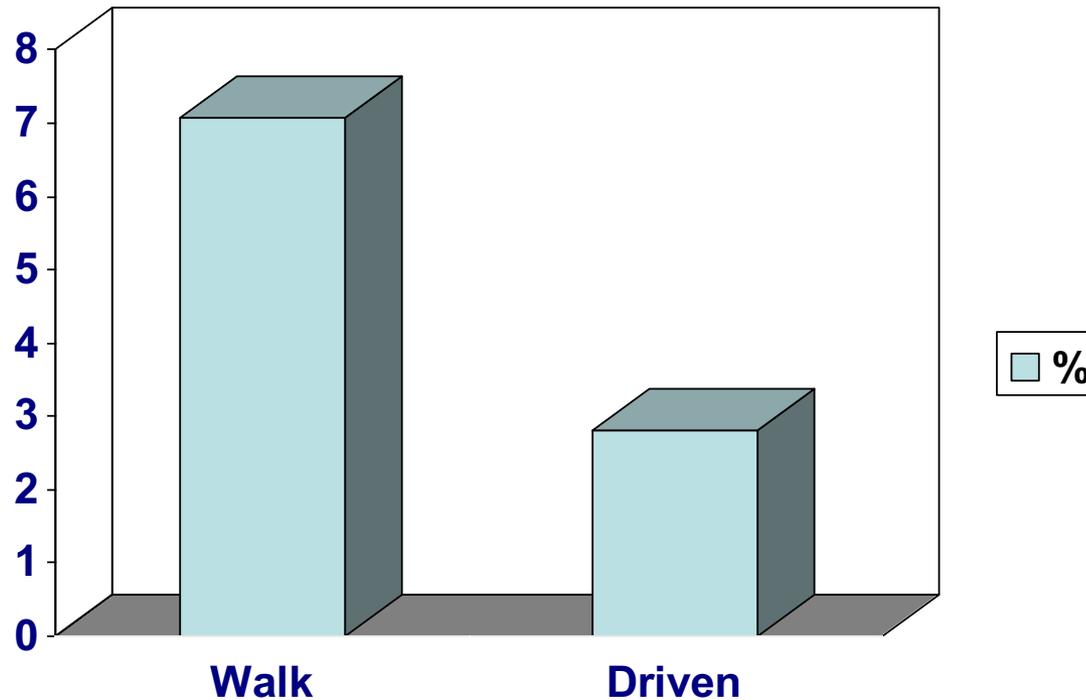


Accelerometry:

- Device-based measure of physical activity
- 7 consecutive days

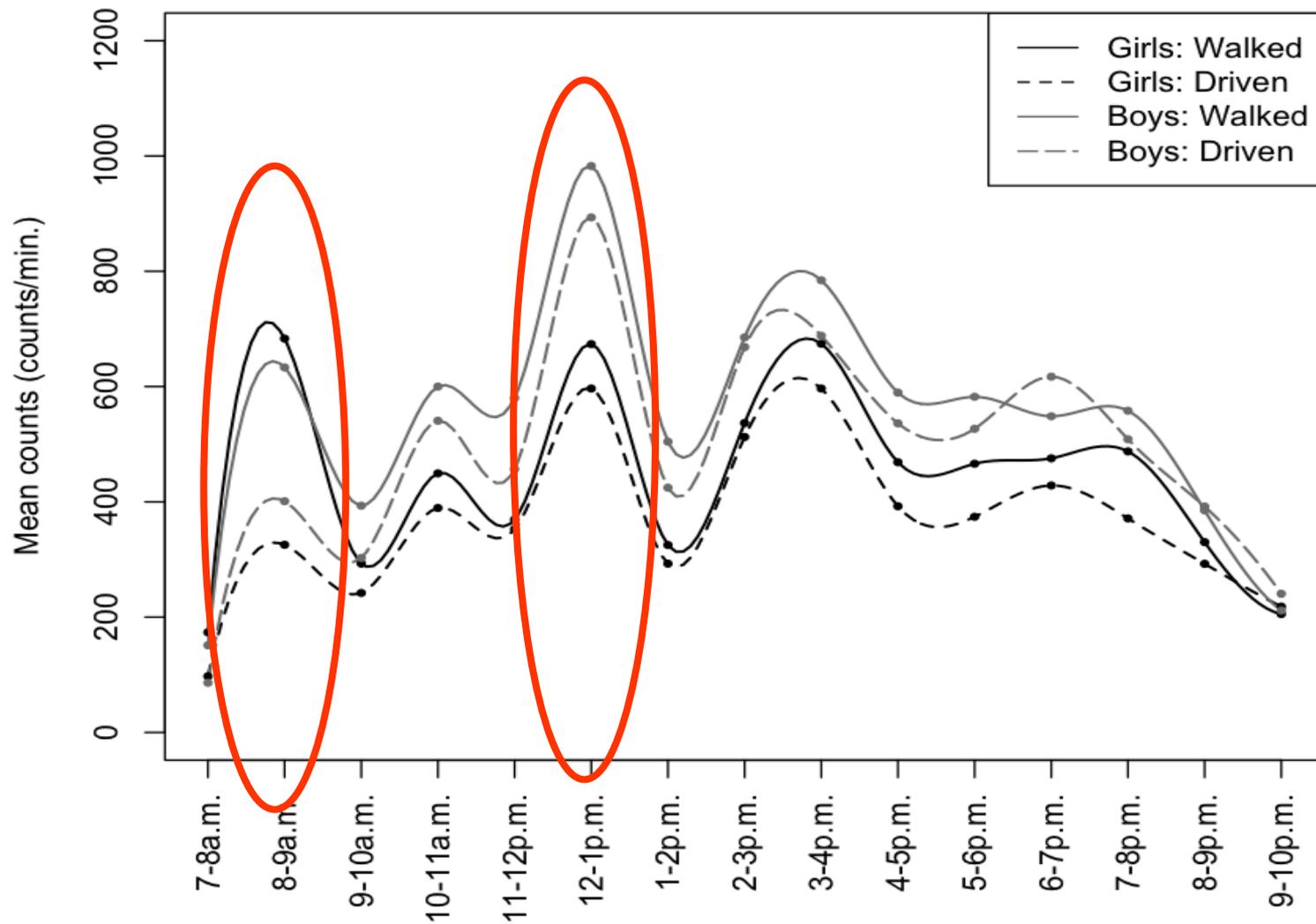


Attaining Physical Activity Guidelines (>60 mins MVPA daily)



Stone, M., Faulkner, G., & Buliung, R. (2013). How active are children in Toronto? A comparison with accelerometry data from the Canadian Health Measures Survey. *Chronic Disease and Injury in Canada*, 33, 61-68.

Count/Min/Day: 1 – 1.6 km



Relationships Among Children's Independent Mobility, Active Transportation, and Physical Activity: A Multisite Cross-Sectional Study

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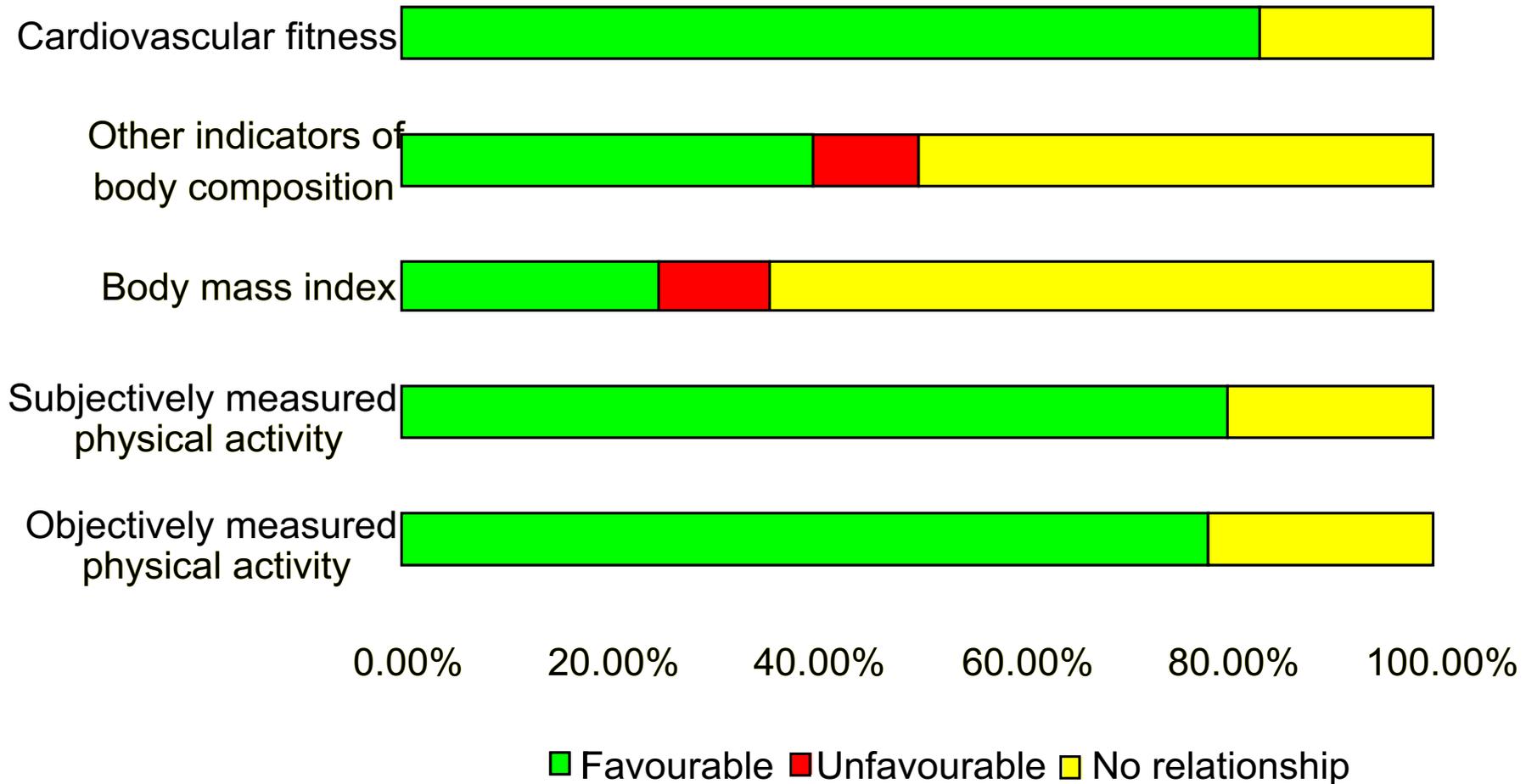
François Trudeau

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A Source of Physical Activity



Larouche, R., Saunders, T., Faulkner, G., Colley, R., & Tremblay, M. (2014). Associations between active school transport and physical activity, body composition and cardiovascular fitness: a systematic review of 57 studies. *Journal of Physical Activity & Health*, 11, 206-227.

Active School Transport

- A source of physical activity
- **Psychosocial benefits**



Walkers versus Drivers



Fusco, C., Faulkner, G., Moola, F., Buliung, R., & Richichi, V. (2013). Urban school travel: Exploring children's qualitative narratives about their trip to school. *Children, Youth and Environments*, 23, 1-23.

RESEARCH ARTICLE

Happiness in Motion: Emotions, Well-Being, and Active School Travel

SUBHA RAMANATHAN, PhD^a CATHERINE O'BRIEN, PhD^b GUY FAULKNER, PhD^c MICHELLE STONE, PhD^d

ABSTRACT

BACKGROUND: A pan-Canadian School Travel Planning intervention promoted active school travel (AST). A novel component was exploring emotion, well-being, and travel mode framed by the concept of “sustainable happiness.” Relationships between travel mode and emotions, parent perceptions of their child’s travel mode on well-being, and factors related to parent perceptions were examined.

METHODS: Questionnaires were administered to families (N = 5423) from 76 elementary schools. Explanatory variables were demographics (age and sex), school travel measures (mode, distance, accompaniment by an adult, safety, and barriers), and emotions (parent and child). Outcomes examined parent perceived benefits of travel mode on dimensions of well-being (physical, emotional, community, and environmental). Descriptive statistics, chi-square tests and hierarchical regression were used.

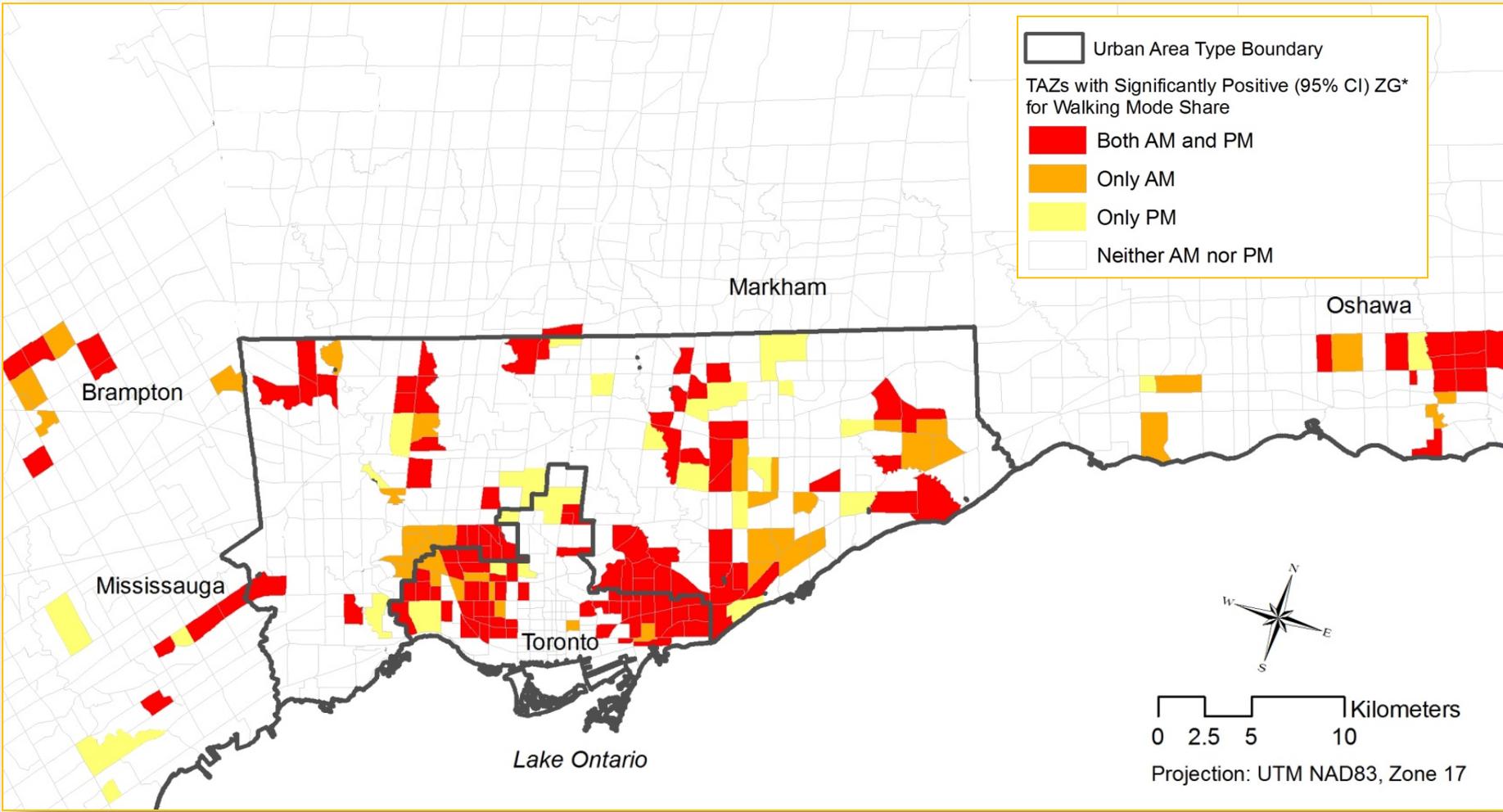
RESULTS: Parents and children who used AST reported more positive emotions versus passive travelers. Parents of active travelers reported stronger connections to dimensions of well-being. AST had the strongest association with parents’ perceptions of their child’s well-being, and positive emotions (parent and child) were also significantly related to well-being on the trip to school.

Active School Transport

- A source of physical activity
- Psychosocial benefits
- **Environmental benefits**



SPACE: Spatial-temporal Clustering of AST in the GTA



Mitra, R., Buliung, R. & Faulkner, G. (2010). Spatial clustering and the temporal mobility of walking school trips in the Greater Toronto Area, Canada. *Health & Place*, 16, 646–655.

Children's Mobility, Health and Happiness: A Canadian School Travel Planning Model

Preventive Medicine 60 (2014) 55–59



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Preventive Medicine

journal homepage: www.elsevier.com/locate/ypmed



Active school travel: An evaluation of the Canadian school travel planning intervention



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Active School Travel Reports

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Regional Transportation

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[Resources for School Communities](#)

[Pedestrian & Cycling Master Plan](#)

Facilitated by the CRD, Active School Travel Plans and final reports are developed collaboratively with schools and community partners (i.e. local government, province) throughout the Ready Step Roll program.



The final reports summarize the school travel planning process, baseline and follow-up data, consultation and engagement highlights, action plans, active travel maps and encouragement/educational resources for each school that has completed the program.

Related Documents

- [Active & Safe Routes to School 2015-16](#)
- [CRD Pedestrian & Cycling Master Plan](#)
- [BC's Active Transportation Strategy](#)

When is a Child More Likely to Walk ?

- **Distance**
 - School is close
- **Traffic and Personal Safety**
 - Does not have to cross major streets on the way to school
 - Roads are not busy
 - There are shops, restaurants, etc. in the area (i.e., eyes on street)
- **Attractiveness, Walkability**
 - Smaller blocks and mixed land use
- **Social Capital**
 - Other people are out and about
 - Opportunity to meet and greet others
- **Gender**
 - Boys
- **Class**
 - Low income households

Exploring 'ways of seeing' active school transport

Purpose



To qualitatively explore how parents/caregivers of children going to school in different neighbourhoods in Toronto make decisions about the trip to/from school.

Sampling & Recruitment

Purposeful Sample

- 37 parents (40 children)
 - 17 AST
 - 20 Non-AST

Inclusion Criteria:

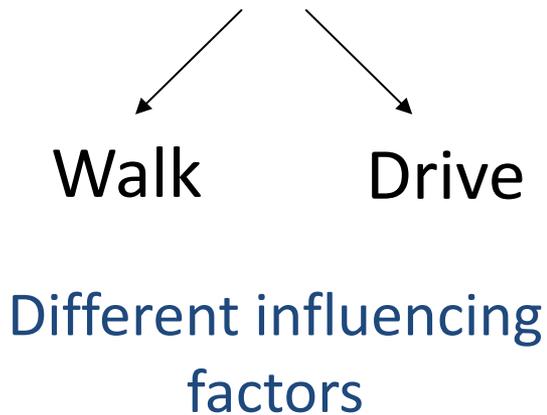
- Interest in project
- Parent/guardian of grade 5/6 student + accompanies child to/from school
- ❖ Lives within 1.6 km from school



Results: Parents

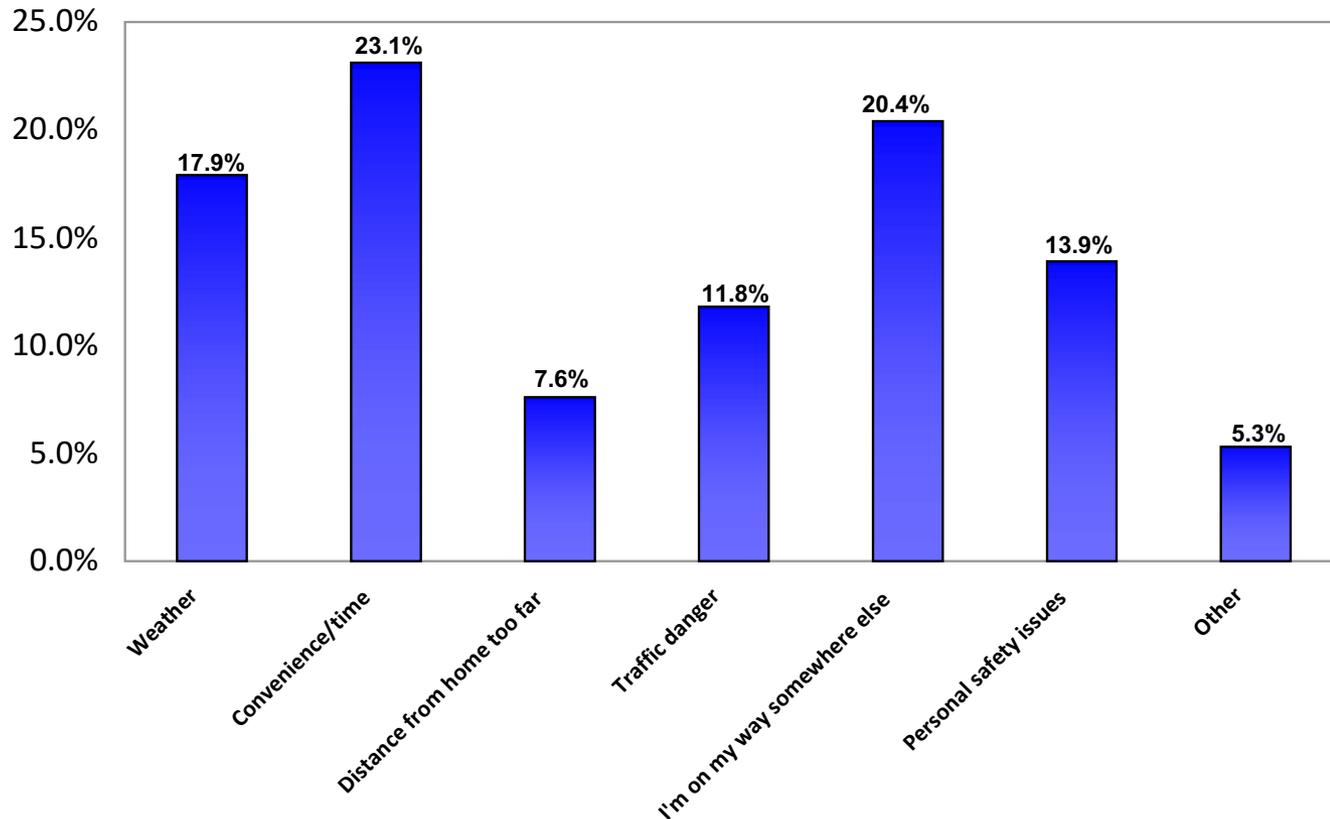
2-Step Decision-Making Process:

- a) Escort decision?
- b) Mode decision?



TIME: Parents who live <1.5 km from school and are still driving

Main reasons for driving children to school (n =1489)

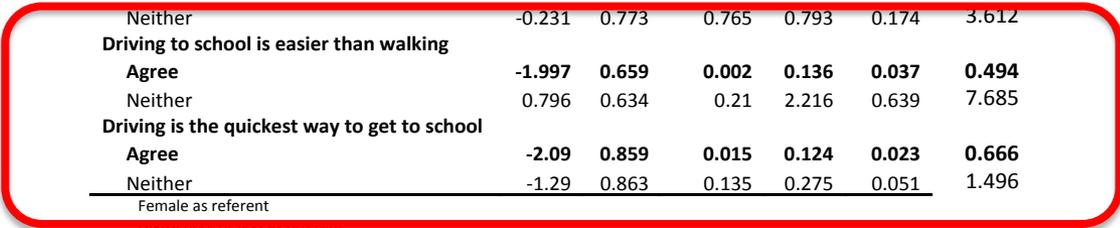


Matched Pairs Analysis

- 118 Matched Pairs
- Households within 200m (walk vs drive)
- Parental survey

Conditional logistic regression for the matched pairs with walking vs driving as the dependent variable

	B	SE	Sig.	Exp(B)	95.0% CI for Exp(B)	
					Lower	Upper
Individual and socio-demographic						
Gender (Male)	1.293	0.571	0.024	3.642	1.19	11.147
Age (Years)	-0.477	0.363	0.189	0.621	0.305	1.264
Vehicles per licenced driver	-1.219	0.93	0.19	0.295	0.048	1.827
Educational attainment						
College	-0.812	0.782	0.299	0.444	0.096	2.058
University	0.427	0.729	0.558	1.532	0.367	6.392
Perceived safety						
There are not enough sidewalks						
Agree	-1.06	0.895	0.236	0.346	0.06	2.001
Neither	-0.919	0.973	0.345	0.399	0.059	2.689
We are worried about strangers						
Agree	-0.158	0.717	0.826	0.854	0.209	3.483
Neither	-0.95	0.937	0.311	0.387	0.062	2.426
There are not enough crossing guards						
Agree	-1.197	0.636	0.06	0.302	0.087	1.051
Neither	-1.416	0.829	0.088	0.243	0.048	1.232
Travelling by car is safer than by foot						
Agree	0.487	0.714	0.495	1.628	0.402	6.596
Neither	-0.163	0.629	0.795	0.849	0.248	2.911
Preferences						
We prefer to drive whenever possible						
Agree	0.449	0.846	0.595	1.567	0.298	8.231
Neither	-0.231	0.773	0.765	0.793	0.174	3.612
Driving to school is easier than walking						
Agree	-1.997	0.659	0.002	0.136	0.037	0.494
Neither	0.796	0.634	0.21	2.216	0.639	7.685
Driving is the quickest way to get to school						
Agree	-2.09	0.859	0.015	0.124	0.023	0.666
Neither	-1.29	0.863	0.135	0.275	0.051	1.496
Female as referent						
High school or less as referent						
Disagree as the referent						
R ² : 0.32						



Larsen, K., Larouche, R., Buliung, R., & Faulkner, G. (2018). A matched pairs approach to assessing parental perceptions and preferences for mode of travel to school. *Journal of Transport & Health*, 11, 56-63,

Implications

Practice

- Interventions tailored to each decision
- Greater attention given to the issue of time & convenience –not commonly considered within intervention work in school travel

Research

- Quantitative studies modeling the influence of different factors on school travel mode should consider differentiating escort and mode
- Focus on independent mobility?

What is Independent Mobility?

The freedom of children to travel around their own neighbourhood or city without adult supervision (Tranter & Whitelegg, 1994)





Figure 26: The Drastic Reduction in the Home Territory of 8-Year-Olds Across 3 Generations (Source: the Daily Mail¹²³).

Understanding the drive to escort: a cross-sectional analysis examining parental attitudes towards children's school travel and independent mobility

George Mammen¹, Guy Faulkner^{1*}, Ron Buliung² and Jennifer Lay³

IM

- older
- families spoke predominantly English at home
- more likely to live within 1.6 km from school

Escort

- Worries about strangers and bullies
- Worries about traffic

Thanks for listening!

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