



# Effects of a school-walking-bus program on mobility and parental risk perception: *the Canadian Cancer Society Trottibus example in Qc*

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## Context: less walking to go to school

- In Western countries, children walk less to go to school than a few years ago.
- Reasons to not let children walk to school include:
  - Distance is too long
  - No time to accompany
  - Fear of stranger danger
  - **Fear of traffic/speed/collisions**



Source : radio canada

# Context: creation of a program to promote walking

- To tackle this decline, several initiatives are now promoted, like walking school bus (WSB) program where children are accompanied by adults on the journey to school (in the morning).
- The Quebec division of the Canadian Cancer Society created the “Trottibus”, a walking school bus program.



⇒ **What does the program “Trottibus” change for children and their parent?**





# Methods

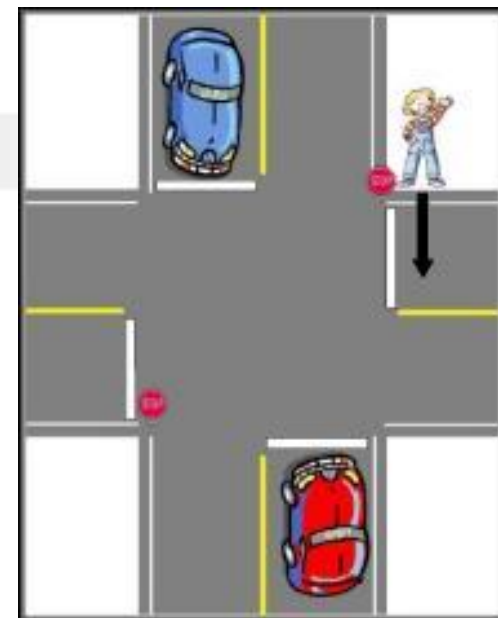


# Mixed methods: Survey and Interview

- **Web survey** with parents and children (adapted):
  - *Step 1 (beginning of the participation in a Trotibus project): 180 parents and 172 children*
  - *Step 2 (six month later) : 71 parents et 63 children*

\* 11.2 Sur le chemin menant à l'école, est-ce que c'est facile...

	Très facile	Facile	Difficile	Très difficile
a) ... de marcher sur les trottoirs (ou dans la rue s'il n'y a pas de trottoir)?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b) ... de traverser les rues?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



## Mixed methods: Survey and Interview

- Parents who agreed to do the follow-up interview in the web survey (n = 90)
- Confirmation of the child's participation in the Trottibus (n = 43/90)
  - Some Trottibus never actually started...
  - Many reasons for the end of their participation
  - Kept all parents with a few months of participation
- Face-to-face interviews (n = 17) and telephone interviews (n = 5)
  - Several regions in Quebec: Montréal, Montérégie, Québec (city), Lévis, St-Hyacinthe, Victoriaville, Nicolet...



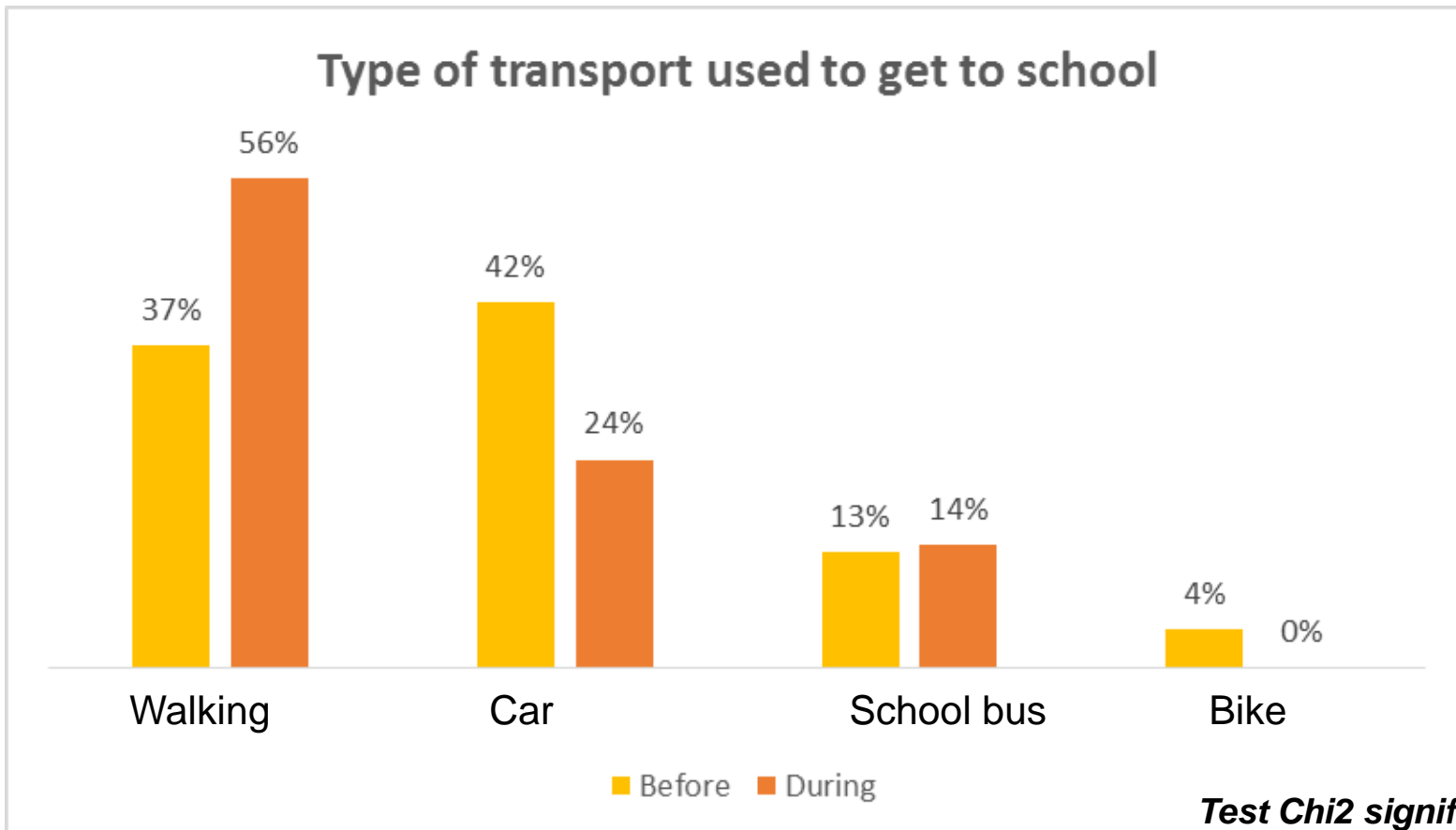
# Results: Modal shift toward walking

## Web survey / interview – Profile of respondents

	Web Survey	Interviews
Gender	90% of women	19 women (86%)
Education	68 % with university degree	19 with university degree (86%)
# Children in the family	22%: one child 48%: two children	12/22: one child (55%) 8/22: two children(36%)
Where do they live	33% in largest cities 46 % in suburbs 19% in small towns	11 in largest cities (50%) 8 in suburbs (36%) 3 in small towns (14%)

# Trottibus encourages walking

- Around 1/3 of children already walk to school before their participation
- A major part was motorized mode (cars, school bus) before Trottibus
- A major part still walk six months after



## But interviews show more complex cases

### About the *complexity of family mobility*

- 2 families live nearby, but used the car, because **several stops were needed in the morning**
- 7 families live moderately close (10 minutes on foot) : they used mixed modes of transportation or were **driving their child on the way to work**
- 6 families live far (at least 15 minutes on foot) and would drive their child because **they consider it too far** (to walk alone)

### About *other advantages* of participating in Trottibus

- Meet new people (especially where you're a volunteer)
- Provide accompaniment (and sense of security to parents!) to younger kids
- Recall their core value: environment, physical activity, etc.



# Results: Road risk perceptions (parents and children)

*No change in perception BUT... Children more confident than their parents...*

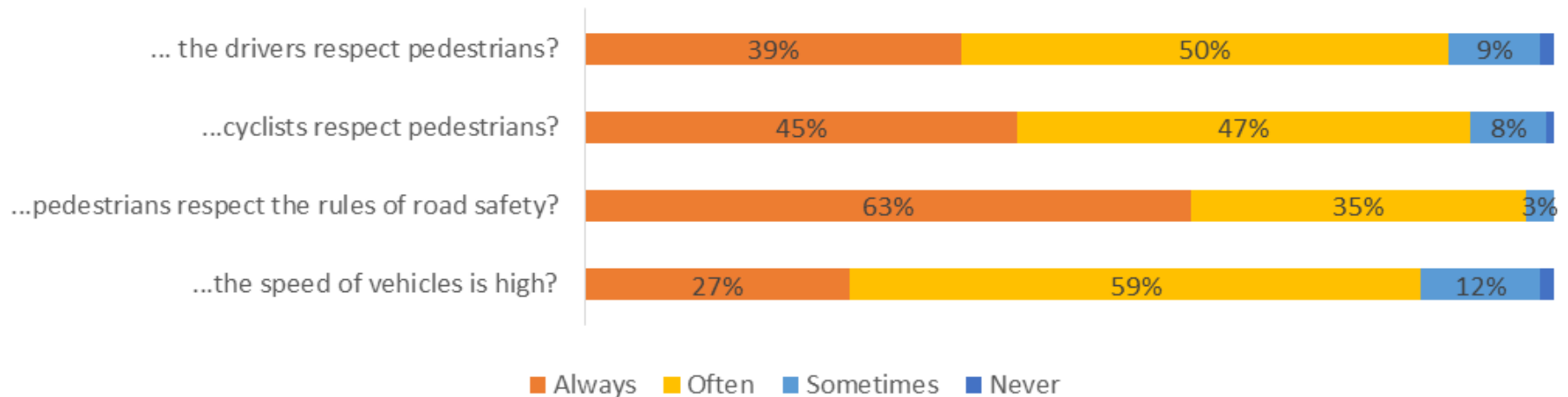
	Children		Parents	
	Before	6-months after	Before	6-months after
<i>On the way to school, it is easy...</i>				
<b>To walk on the sidewalk</b> <i>very easy or easy</i>	<b>91%</b>	<b>92%</b>	<b>65%</b>	<b>74%</b>
<b>To cross the street</b> <i>very easy or easy</i>	<b>78%</b>	<b>86%</b>	<b>67%</b>	<b>71%</b>

*Test Chi2 not significant*

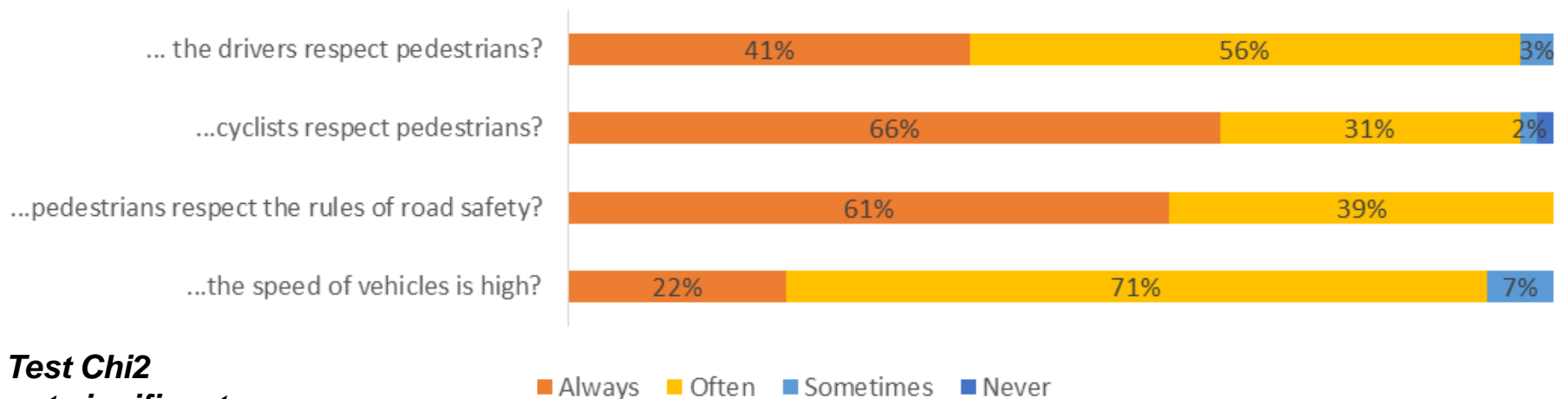
# A very high rate of confidence in other road user behavior from children, before AND after

Perceptions

[BEFORE] On the way to your school, do...



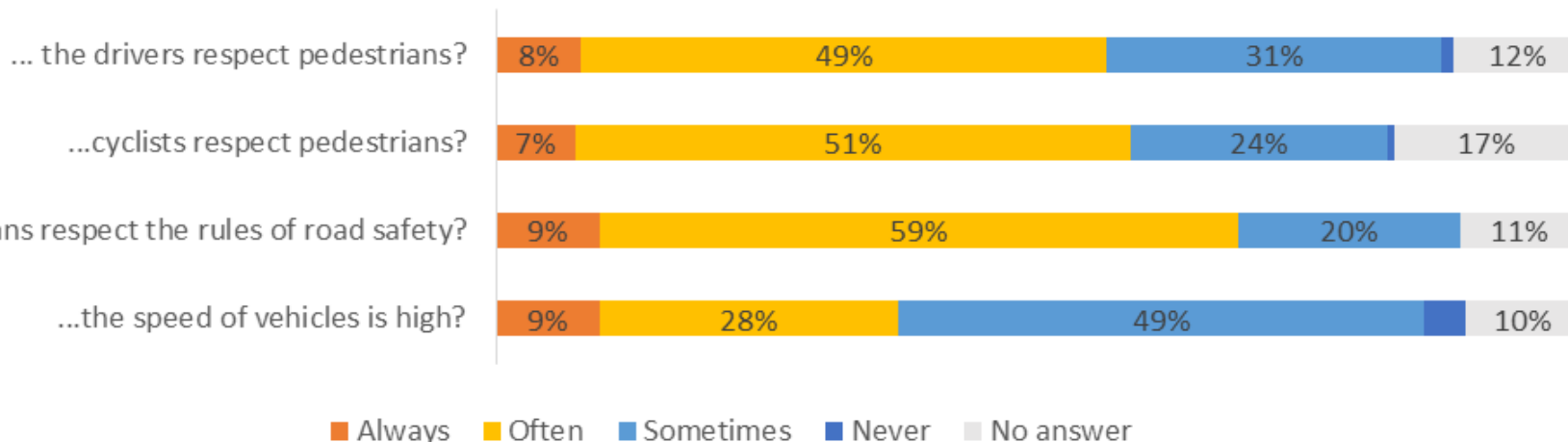
[DURING] On the way to your school, do...



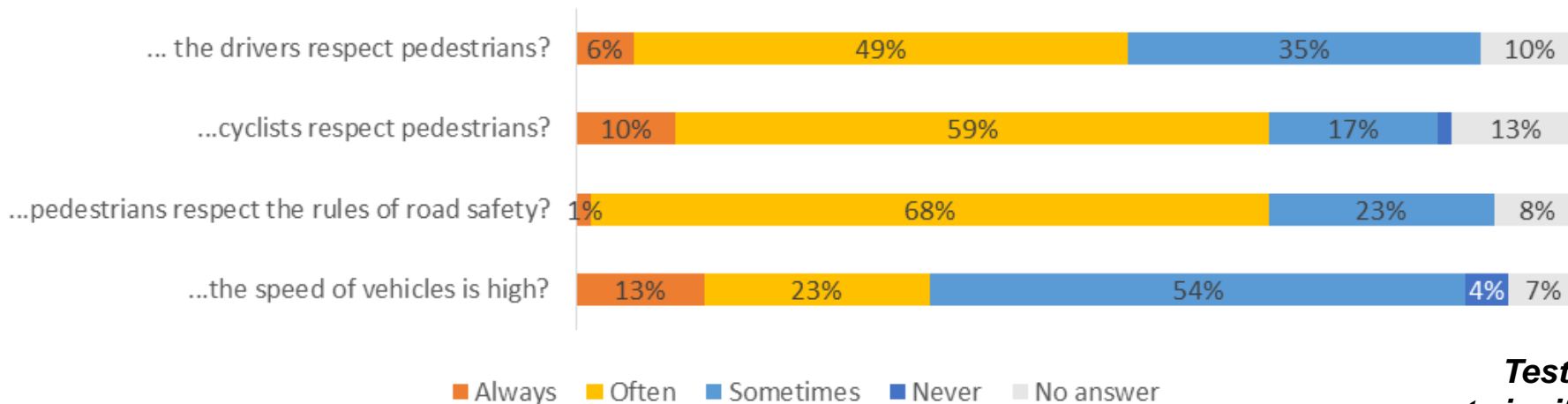
**Test Chi2  
not significant**

# Lower rates of confidence for parents, before and after, but lower speed concerns too

[BEFORE] On the way to your child's school, do...



[DURING] On the way to your child's school, do...



**Test Chi2  
not significant**

# Interviews show more road safety issues

- On speed and traffic volume
  - 8/22 (same % as in the web survey) mentioned that motorists very often **exceed the speed limits**;
  - High traffic volume in the (residential) sector
  - Other **parents being the problem** near school at rush hour
- On crossings
  - Motorists **not stopping at stop signs**
  - Adults do not know how to cross at some very busy intersections
- On Trotibus route choice
  - Dangerous when it crosses hospital's parking entrance (at rush hour) or lane exits (in Montreal)
  - The route passes through a **commercial area with a lot of trucks**
  - The route crossed where there are **no (traffic) lights for pedestrians**
  - The route crosses a section where there are **no school zone signs**

# Conclusion

## About the *Trottibus program*

- There is a real modal shift associated to the program (for children only)
- Little gain in terms of risk perception (or is there?)
- (Maybe) 6-months is too short to see the real impact of such a program

## About our *mixed-method*

- Great insights from interviews, complementary to the survey
- Many ideas on how to improve the program itself (not shown here)

## Further considerations

- Need for a *partnership* between such programs and *cities* to target more than just education/awareness campaigns...



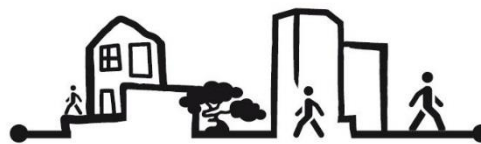
Thanks !  
**QUESTIONS?**

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