

By Your Own Two Feet

Factors Associated with Active Transportation in Canada

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ABSTRACT

Objective: The purpose of this study is to examine socio-demographic, geographic and physical activity correlates of walking and cycling for non-leisure purposes, i.e., to work, school, or errands, in Canada.

Methods: Cross-sectional data from the Canadian Community Health Survey (CCHS) 2003 (n = 127,610) were analyzed using logistic regression to identify factors associated with active transportation. The dependent variables were walking 6+ hours per week and any cycling per week. Independent variables were based on age; marital, education, working and immigrant status; income; geographic location; smoking; and other physical activity.

Results: Age and income were associated with both walking and cycling, as was geographic location and other physical activity. The results demonstrated that, while similar, walking and cycling are associated with different factors, and that socio-demographic, geographic and health behaviour variables must be taken into consideration when modelling these transportation modes.

Conclusions: Although walking and cycling are relatively easy means to incorporate physical activity in daily life, these results suggest that it is the young and the physically active who engage in them. This research points to a need to address barriers among those who could benefit the most from increased use of both modes of travel.

MeSH terms: Physical activity; urban renewal; transportation

La traduction du résumé se trouve à la fin de l'article.

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Walking and cycling to work, school or errands (often termed active transportation) are increasingly recognized as important modes of transportation which provide benefits to both individuals and society. Cycling, in particular, has benefited from heightened recognition that it is a legitimate transportation mode rather than a leisure pursuit, and Western governments are focusing more policy attention on it.¹ Both walking and cycling are advantageous as means of transport and of physical activity. Both modes are relatively inexpensive to the user and in terms of infrastructure dollars, making them attractive methods for obtaining the health benefits accrued from increased physical activity without requiring large capital outlays. However, there is much that is not known about how better to promote these modes among the population.

In order to support active transportation, it is important to better understand the factors that are most associated with walking and cycling for transportation. For example, it is possible that socio-demographic factors are most important. Evidence for this hypothesis has come from Pucher and colleagues who examined data from the United States and found that cycling is inversely related to age and income,² although some research has questioned the link between income and cycling.³ Nevertheless, one recent study has indicated that active transportation may be particularly important for reducing disparities in physical activity across a number of socio-demographic factors such as low income, gender, age, ethnicity, and low education.⁴ Gender has also been found to be important in transportation choice.⁵

A second set of factors associated with active transportation are those of the built environment. Researchers are beginning to quantify neighbourhood elements that encourage or discourage active transportation. Examples include community characteristics such as neighbourhood crime, prevalence of walking routes and the visual aesthetics of the community.⁶ In addition, research has linked community characteristics and the nature of the built environment with the obesity of residents – suggesting that residents of compact cities are more likely to walk or bike to destinations.^{7,8} Geography seems to be an

important factor at the macro level as well, with national differences in cycling patterns existing between Canada and the United States.⁹

Finally, the relationship between active transportation and other forms of physical activity should be included in models seeking to explain physical activity. It is possible that individuals who are active in other domains of their daily lives are also more likely to engage in active transportation because of an underlying motivation towards physical activity. Past studies have demonstrated a relationship between reduced mortality and vigorous walking and or cycling,^{10,11} and it is possible that the health benefits accrued from active transportation may be providing the motivation to be more active rather than age or income. Including levels of other forms of physical activity will allow a clearer interpretation of factors specifically related to active modes of transportation as opposed to fitness in general.

The purpose of the present study is to examine three types of factors that may be associated with participation in physically active transportation: socio-demographic, geographic, and other physical activities. The present study employs multivariate techniques which allow for the development of more nuanced and robust models of transportation choices based on a large number of variables. Multivariate methods have been successfully employed elsewhere to examine travel behaviour.¹²

METHODS

Analyses were conducted on the 2003 Canadian Community Health Survey (CCHS)¹³ share file. The CCHS is a biannual cross-sectional computer-assisted telephone interview survey of Canadian respondents aged 12 and over residing in households (n = 127,610), in all provinces and territories, but excluding populations living on Indian Reserves, Canadian Forces Bases and in some remote areas. The 2003 CCHS sample is representative of the Canadian household population. Only respondents aged 15 and older with complete data on all studied variables were included, resulting in a sample size of 77,953. In addition, prevalences of walking and cycling for transportation were obtained from the 2000/01 CCHS and the 2005 CCHS.

TABLE I
Characteristics of the Study Sample

Variable	Males N = 37,591		Females N = 40,362	
	Number	Percent	Number	Percent
Age				
15-19	2528	6.7%	2278	5.6%
20-29	4916	13.1%	6015	14.9%
30-44	11,713	31.2%	12,105	30.0%
45-64	13,610	36.2%	14,468	35.8%
≥65	4824	12.8%	5496	13.6%
Marital status				
Widowed/divorced/separated	4854	12.9%	8862	22.0%
Single	10,335	27.5%	9010	22.3%
Married/common law	22,402	59.6%	22,490	55.7%
Currently working	25,449	67.7%	22,335	55.3%
Currently in school	3747	10.0%	4524	11.2%
Education				
Less than secondary	8620	22.9%	8516	21.1%
Secondary	6601	17.6%	7581	18.8%
Some post-secondary	2741	7.3%	3053	7.6%
Post-secondary degree	19,629	52.2%	21,212	52.6%
Yearly income				
<\$20,000	4014	10.7%	6972	17.3%
\$20,000-\$39,999	8046	21.4%	10,029	24.8%
\$40,000-\$59,999	8033	21.4%	8089	20.0%
\$60,000-\$79,999	6722	17.9%	6329	15.7%
≥\$80,000	10,776	28.7%	8943	22.2%
Immigrant status	4945	13.2%	4969	12.3%
Region				
Atlantic	3886	10.3%	4575	11.3%
Quebec	8345	22.2%	8979	22.2%
Ontario	12,445	33.1%	13,441	33.3%
Prairies	7656	20.4%	7964	19.7%
British Columbia	4467	11.9%	4607	11.4%
Territories	792	2.1%	796	2.0%
Urban dwelling type				
Urban core resident	21,583	57.4%	23,976	59.4%
Rural area resident	7384	19.6%	7228	17.9%
Other resident	8624	22.9%	9158	22.7%
Daily/occasional smoker	10,597	28.2%	10,374	25.7%
Typical daily activity				
Usually sitting	8557	22.8%	9573	23.7%
Standing or walking	14,454	38.5%	19,233	47.7%
Light carrying	9691	25.8%	10,071	25.0%
Heavy carrying	4889	13.0%	1485	3.7%
Physical activity index				
Active	11,022	29.3%	9329	23.1%
Moderate	9540	25.4%	10,677	26.5%
Inactive	17,029	45.3%	20,356	50.4%
Cycling	3508	9.3%	1962	4.9%
Walking	8483	22.6%	9312	23.1%

Data Source: 2003 Canadian Community Health Survey, Share file

All data were self-reported. Answers to questions asking respondent how many hours per week they spent cycling or walking to school, work or errands were recoded into the categories of cycling at all and walking 6 or more hours to school, work or errands. Because walking to school, work or errands at all was a common occurrence, a more conservative threshold of 6 or more hours per week was chosen to identify those who regularly walked as a mode of transportation.

Socio-demographic predictors of active transportation were chosen based on previous research as well as those which may be helpful for targeting public health interventions. Independent variables were categorical and included the following socio-demographic predictors: age; marital sta-

tus; labour force status; student status; education level; yearly household income; immigrant status; region; urban/rural status; smoking status; typical daily activity; and leisure-time physical activity as measured by the Physical Activity Index (PAI). The PAI is computed by calculating average daily energy expenditure based on the type and frequency of participation in leisure-time physical activities. Categories of variables can be seen in Table I.

Prevalences of cycling or walking to school, work or errands were calculated, and their confidence intervals estimated through the bootstrap procedure. Logistic regression was used to predict cycling or walking for transportation from three sets of variables. First, a socio-demographic model was run in which the independent

TABLE II

Prevalence of Cycling, and Walking 6 or More Hours, to School, Work or Errands, Men and Women 15+, Canada 2000/01 to 2005

Year	Cycling				Walking			
	Men		Women		Men		Women	
	Prevalence	95% CI	Prevalence	95% CI	Prevalence	95% CI	Prevalence	95% CI
2000/01	8.76	8.43-9.09	5.12	4.87-5.38	19.11	18.60-19.63	21.25	20.73-21.77
2003	10.04†	9.65-10.43	5.43	5.17-5.69	21.05†	20.46-21.46	21.79	21.29-22.30
2005	10.35†	9.98-10.73	5.70†	5.43-5.97	22.68†	22.13-23.23	23.02†	22.54-23.51

† significantly different from 2000/01 estimate at p<0.05

TABLE III

Odds Ratios for Cycling to Work, School or Errands, Men and Women 15+, Canada, 2003

Variables	Men (n = 37,591)						Women (n = 40,362)					
	Model 1		Model 2		Model 3		Model 1		Model 2		Model 3	
	Odds Ratio	95% CI	Odds Ratio	95% CI	Odds Ratio	95% CI	Odds Ratio	95% CI	Odds Ratio	95% CI	Odds Ratio	95% CI
Age												
15-19	2.33**	1.79-3.06	2.34**	1.79-3.07	1.89**	1.42-2.50	1.64**	1.15-2.32	1.63**	1.14-2.32	1.42	0.99-2.03
20-29	1.03	0.85-1.24	1.03	0.85-1.24	0.94	0.78-1.14	0.96	0.77-1.18	0.95	0.77-1.17	0.95	0.77-1.17
30-44‡	1.00	–	1.00	–	1.00	–	1.00	–	1.00	–	1.00	–
45-64	0.73**	0.62-0.85	0.73**	0.62-0.86	0.74**	0.63-0.87	0.71**	0.58-0.86	0.71**	0.58-0.86	0.72**	0.59-0.88
≥65	0.51**	0.38-0.68	0.50**	0.37-0.67	0.44**	0.33-0.60	0.44**	0.33-0.59	0.44**	0.33-0.59	0.45**	0.34-0.61
Marital status												
Widowed/divorced/ separated	1.02	0.85-1.22	1.00	0.83-1.19	0.95	0.80-1.14	1.03	0.78-1.35	1.03	0.78-1.35	1.01	0.77-1.32
Single	1.38**	1.18-1.60	1.35**	1.16-1.57	1.25**	1.07-1.47	1.32**	1.09-1.61	1.36**	1.12-1.65	1.27*	1.04-1.55
Married/common law‡	1.00	–	1.00	–	1.00	–	1.00	–	1.00	–	1.00	–
Currently working§	1.05	0.91-1.21	1.03	0.9-1.19	1.07	0.93-1.25	1.14	0.98-1.32	1.13	0.98-1.31	1.16	1.00-1.34
Currently in school§	1.39**	1.14-1.70	1.38**	1.13-1.69	1.31**	1.07-1.61	1.60**	1.25-2.05	1.61**	1.25-2.06	1.57**	1.22-2.02
Education												
Less than secondary	0.88	0.75-1.04	0.91	0.77-1.07	0.97	0.82-1.14	0.85	0.68-1.06	0.85	0.68-1.05	0.90	0.72-1.13
Secondary	0.79**	0.67-0.92	0.79**	0.67-0.92	0.82*	0.70-0.97	0.98	0.79-1.22	0.97	0.78-1.21	0.99	0.79-1.24
Some post-secondary	0.77**	0.60-0.98	0.77	0.6-0.98	0.80	0.62-1.02	0.79	0.60-1.03	0.77	0.59-1.01	0.79	0.61-1.04
Post-secondary degree‡	1.00	–	1.00	–	1.00	–	1.00	–	1.00	–	1.00	–
Yearly income												
<\$20,000	1.58**	1.29-1.93	1.61**	1.31-1.98	1.92**	1.54-2.39	1.14	0.89-1.47	1.15	0.89-1.49	1.30*	1.00-1.70
\$20,000-\$39,999	1.25*	1.05-1.48	1.29**	1.08-1.53	1.48**	1.24-1.77	1.05	0.84-1.30	1.04	0.84-1.31	1.17	0.94-1.47
\$40,000-\$59,999	0.98	0.83-1.15	1.01	0.85-1.19	1.11	0.94-1.31	1.09	0.87-1.38	1.09	0.86-1.38	1.20	0.94-1.52
\$60,000-\$79,999	1.05	0.89-1.23	1.06	0.9-1.24	1.13	0.96-1.33	0.82	0.65-1.03	0.82	0.65-1.03	0.86	0.68-1.09
≥\$80,000‡	1.00	–	1.00	–	1.00	–	1.00	–	1.00	–	1.00	–
Immigrant status§	0.80*	0.67-0.97	0.75**	0.62-0.91	0.81*	0.67-0.98	0.58**	0.46-0.74	0.59**	0.46-0.75	0.64**	0.50-0.82
Regional group												
Atlantic			0.58**	0.45-0.74	0.58**	0.46-0.74			0.54**	0.41-0.70	0.58**	0.44-0.76
Quebec			0.99	0.84-1.17	1.04	0.88-1.22			1.06	0.88-1.29	1.16	0.96-1.41
Ontario‡			1.00	–	1.00	–			1.00	–	1.00	–
Prairies			1.05	0.9-1.23	1.04	0.88-1.22			1.31**	1.09-1.57	1.25*	1.04-1.50
British Columbia Territories			1.20**	1.02-1.42	1.08	0.91-1.28			1.31**	1.05-1.63	1.14	0.91-1.42
Urban dwelling type			1.35	0.94-1.95	1.41	0.98-2.03			1.55*	1.01-2.37	1.53	0.99-2.37
Urban core resident			1.12	0.98-1.29	1.13	0.99-1.31			0.90	0.75-1.08	0.94	0.78-1.13
Rural area resident			1.00	0.83-1.21	1.01	0.84-1.22			1.04	0.80-1.35	1.02	0.78-1.32
Other resident‡			1.00	–	1.00	–			1.00	–	1.00	–
Daily/occasional smokers§					0.91	0.79-1.04					1.09	0.92-1.29
Typical daily activity												
Usually sitting‡					1.00	–					1.00	–
Standing or walking					1.21*	1.03-1.41					1.32**	1.09-1.62
Light carrying					1.26**	1.06-1.50					1.25*	1.01-1.54
Heavy carrying					1.15	0.93-1.41					1.70**	1.15-2.51
Physical activity index												
Active					3.15**	2.71-3.66					3.70**	3.12-4.40
Moderate					1.93**	1.63-2.29					1.80**	1.49-2.20
Inactive‡					1.00	–					1.00	–

Data Source: 2003 Canadian Community Health Survey, Share file

Note: Because of rounding, some confidence intervals with 1.0 as lower/upper limit are significant.

‡ Reference category § Reference category is absence of indicator * p<0.05 ** p<0.001

variables were all categorical and included age, marital status, working and student status, education level, yearly household income, and immigrant status. Second, a model was run adding geographic variables (region and urban/rural status) to the socio-demographic model. In addition to the variables included in the first two mod-

els, a third model included the health behaviours of smoking status, typical daily activity, and level of leisure-time physical activity. Because important differences have been observed between men and women in their transportation behaviour, all analyses were gender-stratified. Bootstrapping was used to generate

95% confidence intervals of the estimates in SPSS version 12.0 for Windows.¹⁴

RESULTS

Table I demonstrates the composition of the analyzed sample as well as levels of cycling and walking to school, work or

TABLE IV

Odds Ratios for Walking 6+ Hours to Work, School or Errands, Men and Women 15+, Canada, 2003

Variables	Men (n = 37,591)						Women (n = 40,362)					
	Model 1		Model 2		Model 3		Model 1		Model 2		Model 3	
	Odds Ratio	95% CI	Odds Ratio	95% CI	Odds Ratio	95% CI	Odds Ratio	95% CI	Odds Ratio	95% CI	Odds Ratio	95% CI
Age												
15-19	0.90	0.72-1.13	0.87	0.69-1.09	0.80*	0.63-1.00	1.12	0.89-1.41	1.10	0.87-1.39	0.97	0.76-1.23
20-29	1.12	0.98-1.27	1.11	0.97-1.28	1.07	0.93-1.22	1.10	0.99-1.23	1.10	0.98-1.23	1.07	0.95-1.20
30-44‡	1.00	–	1.00	–	1.00	–	1.00	–	1.00	–	1.00	–
45-64	0.90**	0.82-0.99	0.90*	0.81-0.99	0.92	0.83-1.01	0.83**	0.76-0.91	0.84**	0.77-0.92	0.85**	0.77-0.93
≥65	0.78**	0.67-0.92	0.75**	0.64-0.88	0.79**	0.67-0.92	0.79**	0.69-0.91	0.78**	0.68-0.89	0.81**	0.71-0.94
Marital status												
Widowed/divorced/ separated	0.97	0.86-1.10	0.98	0.86-1.11	0.95	0.84-1.08	0.96	0.86-1.07	0.94	0.84-1.06	0.97	0.87-1.09
Single	1.01	0.90-1.13	1.02	0.91-1.15	1.02	0.90-1.15	0.92	0.82-1.02	0.91	0.81-1.02	0.94	0.83-1.06
Married/common law‡	1.00	–	1.00	–	1.00	–	1.00	–	1.00	–	1.00	–
Currently working§	1.03	0.93-1.14	1.00	0.9-1.12	0.94	0.84-1.05	1.00	0.92-1.08	0.97	0.89-1.05	1.01	0.92-1.10
Currently in school§	1.25*	1.05-1.48	1.28**	1.08-1.53	1.36**	1.14-1.62	1.09	0.95-1.25	1.14	0.99-1.31	1.21**	1.05-1.40
Education												
Less than secondary	1.07	0.94-1.20	1.04	0.92-1.18	0.96	0.85-1.08	0.91	0.80-1.03	0.92	0.81-1.05	0.92	0.81-1.05
Secondary	1.15*	1.03-1.29	1.10	0.98-1.23	0.99	0.89-1.11	1.11*	1.00-1.24	1.06	0.95-1.18	1.03	0.93-1.15
Some post-secondary	1.15	0.98-1.36	1.12	0.94-1.33	1.05	0.89-1.25	1.20**	1.06-1.37	1.13	0.99-1.29	1.11	0.97-1.27
Post-secondary degree‡	1.00	–	1.00	–	1.00	–	1.00	–	1.00	–	1.00	–
Yearly income												
<\$20,000	1.23*	1.04-1.45	1.31**	1.11-1.56	1.29**	1.08-1.53	1.26**	1.09-1.46	1.41**	1.22-1.65	1.39**	1.19-1.62
\$20,000-\$39,999	1.28**	1.13-1.45	1.38**	1.21-1.58	1.25**	1.09-1.43	1.17*	1.03-1.33	1.28**	1.12-1.45	1.23**	1.08-1.40
\$40,000-\$59,999	1.09	0.96-1.23	1.14*	1.01-1.29	1.02	0.91-1.16	1.10	0.96-1.25	1.18**	1.03-1.34	1.15*	1.00-1.31
\$60,000-\$79,999	1.11	0.99-1.24	1.14*	1.02-1.28	1.05	0.94-1.18	1.00	0.89-1.13	1.04	0.92-1.17	1.00	0.88-1.13
≥\$80,000‡	1.00	–	1.00	–	1.00	–	1.00	–	1.00	–	1.00	–
Immigrant status§	1.03	0.91-1.16	0.98	0.86-1.11	1.02	0.90-1.17	1.07	0.96-1.20	0.92	0.82-1.03	1.01	0.90-1.13
Regional group												
Atlantic			0.96	0.84-1.10	0.97	0.84-1.11			0.90	0.79-1.03	0.92	0.81-1.06
Quebec			0.56**	0.48-0.64	0.57**	0.49-0.66			0.40**	0.35-0.46	0.41**	0.36-0.47
Ontario‡			1.00	–	1.00	–			1.00	–	1.00	–
Prairies			1.09	0.97-1.23	1.10	0.97-1.24			1.00	0.88-1.12	0.98	0.87-1.10
British Columbia			1.08	0.96-1.22	1.06	0.94-1.20			1.12	0.99-1.26	1.08	0.96-1.22
Territories			1.36*	1.07-1.73	1.39*	1.10-1.77			0.86	0.66-1.12	0.89	0.68-1.17
Urban dwelling type												
Urban core resident			0.91	0.82-1.01	0.97	0.88-1.08			1.05	0.95-1.15	1.11*	1.01-1.22
Rural area resident			1.09	0.96-1.24	1.07	0.94-1.21			1.01	0.89-1.14	0.99	0.87-1.12
Other resident‡			1.00	–	1.00	–			1.00	–	1.00	–
Daily/occasional smoker§												
					1.17**	1.07-1.28					1.23**	1.13-1.34
Typical daily activity												
Usually sitting‡					1.00	–					1.00	–
Standing or walking					1.98**	1.71-2.29					1.78**	1.60-1.98
Light carrying					2.81**	2.42-3.27					2.52**	2.24-2.84
Heavy carrying					2.6**	2.21-3.08					2.55**	2.11-3.09
Physical activity index												
Active					1.04	0.94-1.14					1.28**	1.16-1.40
Moderate					0.96	0.87-1.05					1.25**	1.13-1.38
Inactive‡					1.00	–					1.00	–

Data Source: 2003 Canadian Community Health Survey, Share file

Note: Because of rounding, some confidence intervals with 1.0 as lower/upper limit are significant.

‡ Reference category § Reference category is absence of indicator * p<0.05 ** p<0.001

errands in 2003. Walking 6 or more hours per week to work, school or errands at 23% of both men and women is far more common than cycling for both men and women (9% and 5%, respectively). There is some overlap between these behaviours: about a quarter of male cyclists also walk 6 or more hours per week, while almost a third of female cyclists do. In contrast, only 13% of male and 7% of female walkers also cycle to school, work or errands. As Table II indicates, levels of active transportation have been rising through 2000/01 to 2005. For both modes and for both genders, the increase in prevalence has been statistically significant from 2000/01.

Table III shows that factors from all three models are associated with cycling. Age appears to be particularly important, with the youngest being significantly more likely to cycle than middle-aged adults, and older adults being less likely. Single individuals are more likely to cycle, as are those who are currently enrolled in school. Education and income play a role for men only, with the most highly educated, and those with the lowest income most likely to cycle. Among both genders, immigrants were less likely to cycle. The odds of cycling increased the further west the province and again in the territories. For both genders, being physically active in other spheres of life (leisure and daily

activity) was associated with higher odds of cycling.

For both genders, and all models, lower incomes were more highly associated with walking (Table IV). There is also evidence that, not surprisingly, being a student is associated with walking for transport. Looking at the geographic variables, men in the Territories seem much more likely to walk for transport than in any other region. For both genders, walking for transport appears much less likely in Québec than in any other region. As was observed with cycling, there is a high association between walking for transport and being physically active during usual daily activities. For women, a positive associa-

tion also was demonstrated for a positive score on the Physical Activity Index, while this relationship was not observed among men.

DISCUSSION

Three models were examined in this study: socio-demographic, geographic, and health behaviours and physical activity. Age; income; education, immigrant and marital status; regional location; smoking; and physical activity were all found to have positive association with active transportation. Therefore, the study suggests that variables from all three areas should be considered in future walking and cycling models.

This study suggests that although there are similarities between walking and cycling as modes of active transportation, they are also clearly separate phenomena. This should not be surprising given their different characteristics. While cycling was once promoted as a means of opening up suburban living in the days before widespread motor vehicle proliferation,¹⁵ walking is a much slower mode of travel and more suited to densely packed travel environments than cycling and to more compact distances. Walking is also far more accommodated in modern urban life, with more infrastructure devoted to supporting it as a mode of travel than cycling. Finally, walking is by far the more dominant partner in the active transportation portfolio. With the exception of the Netherlands, walking rates have been reported as higher than cycling rates for a number of developed countries.¹⁶

The finding that cycling and walking are age-dependent is particularly unfortunate from a public health perspective. Both cycling and walking have the potential to provide vigorous but low-impact physical activity for older Canadians. Other research has suggested that this age group chooses not to cycle due to safety concerns,¹⁷ and therefore, addressing perceived safety concerns may need to be a particular focus of promotion efforts in order to reverse the tendency away from active transportation among older Canadians.

The associations between cycling and walking with lower incomes suggests that money spent on pedestrian and cycling

infrastructure is particularly important in supporting the mobility and participation of lower-income individuals in work and community life. Where opportunities exist to walk and cycle, these findings suggest that low-income Canadians are more likely to make use of them. Further study could examine if labour force or educational participation is higher among lower-income Canadians where there are greater opportunities to walk and cycle.

Our methods do not allow the establishment of causal relationships between the variables, and thus further research is warranted into the relationship between leisure cycling and cycling for transport, and physical activity at work and walking for transport. Self-reports may also differ from actual measurements of physical activity, and thus further research using accelerometers to measure active transportation would increase accuracy. Does encouraging leisure cycling lead individuals to consider using their bike for other reasons? Does physical activity during the workday give people the energy to incorporate walking into their daily routine? The strong relationship between physical activity variables holds out the possibility of leveraging them for greater health promotion. Finally, the regional variation in walking and cycling as modes of travel raises more questions than it answers and warrants further attention. Certainly there is room for more analysis of cycling and walking behaviour at the regional, provincial and city level.

Ultimately, our research demonstrates that health promotion activities employed in this area will require some subtlety. What works for older Canadians might not work for the young, and different approaches appear to be needed for different regions, and for Canadians of different incomes. Perhaps most importantly, our work suggests that uniform strategies aimed at the whole population level may be less effective than a targeted approach with different messages for different groups.

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RÉSUMÉ

Objectif : Cette étude menée au Canada porte sur les facteurs sociodémographiques, géographiques et d'activité physique associés à la marche et à l'usage de la bicyclette autrement que pour les loisirs (p. ex. pour se rendre au travail ou à l'école ou pour faire ses courses).

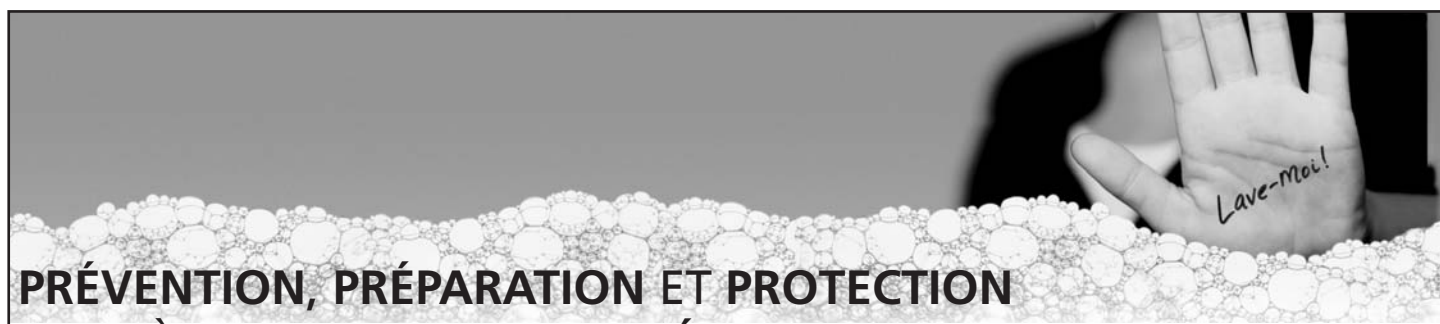
Méthode : Nous avons analysé par régression logistique des données transversales tirées de l'Enquête sur la santé dans les collectivités canadiennes de 2003 (n=127 610) afin de cerner les facteurs associés au transport actif. Les variables dépendantes étaient le fait de marcher six heures et plus par semaine et l'usage de la bicyclette au moins une fois par semaine (durée non spécifiée). Les variables indépendantes étaient l'âge, l'état matrimonial, l'instruction, la situation professionnelle, le statut d'immigrant, le revenu, l'emplacement géographique, le tabagisme et les autres formes d'activité physique.

Résultats : L'âge et le revenu étaient associés à la marche et à la bicyclette, tout comme l'emplacement géographique et les autres formes d'activité physique. Les résultats obtenus, très semblables pour la marche et pour la bicyclette, montrent cependant que ces deux activités sont associées à des facteurs différents et qu'il faut tenir compte des variables sociodémographiques, géographiques et d'activité physique lorsqu'on élabore des modèles pour ces deux moyens de transport.

Conclusion : La marche et la bicyclette sont deux moyens relativement faciles d'intégrer l'activité physique au quotidien, mais les résultats obtenus donnent à penser que ce sont surtout les jeunes et les personnes actives qui les pratiquent. Il faudrait étudier les obstacles qui empêchent les personnes qui en profiteraient le plus d'utiliser davantage ces deux moyens de transport.

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PRÉVENTION, PRÉPARATION ET PROTECTION FACE À LA PROCHAINE PANDÉMIE DE GRIPPE

L'Association canadienne de santé publique (ACSP) et le Réseau d'alerte pandémique (RAP) informent les Canadiens sur les précautions que nous pouvons tous prendre pour empêcher la propagation de la maladie, réagir à un état d'urgence et protéger notre santé durant la pandémie.

Partout dans le monde, les gouvernements se mobilisent en vue de la prochaine pandémie de grippe. Les sites Web, fiches d'information et listes de vérification se multiplient. Mais il arrive souvent que le langage soit compliqué et que les renseignements fournis soient de nature technique. C'est la raison pour laquelle l'ACSP et le RAP ont mis au point une trousse d'informations pratiques, fondées sur des faits et rédigées en langage simple.

Cette trousse simple et pratique donnera aux Canadiens l'information dont ils ont besoin pour se protéger durant une pandémie de grippe. Il s'agit de simples précautions que tout le monde peut prendre dans la vie de tous les jours.

Ces mesures de santé publique se résument en trois mots :

1. **PRÉVENTION** – bonnes habitudes d'hygiène qui réduisent le risque d'attraper et de transmettre la maladie, par exemple bien se laver les mains;
2. **PRÉPARATION** – instructions faciles à suivre pour se préparer à la pandémie de grippe ou à toute autre situation d'urgence;
3. **PROTECTION** – renseignements essentiels pour se soigner et se protéger durant la pandémie.

Avec cette trousse, l'ACSP veut inciter les Canadiens à mieux se renseigner et à mettre en pratique les conseils qui leur sont donnés sous forme de simples précautions, afin de limiter les dégâts que la prochaine pandémie pourrait causer. On espère que ces mesures renforceront la résilience et que toute la population sera mieux préparée à faire face à une pandémie de grippe ou à toute autre situation d'urgence en matière de santé publique.

La trousse est disponible en français et en anglais, en ligne. Consultez le site www.pandemie.cpha.ca.