Physical Activity and Immigrant Status

Evidence from the Canadian Community Health Survey

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ABSTRACT

Background: The immigrant population in Canada is diverse and growing, yet little is known about their physical activity behaviour and how it changes as they adapt to a Canadian lifestyle. This study extends the surveillance of physical activity in Canada to include the influence of time since immigration within and between ethnic groups.

Methods: Pooled data from cycles 1.1 (2000/01) and 2.1 (2003) of the cross-sectional Canadian Community Health Survey (ages 20-64 y; N=171,513) were used for this study. Weighted prevalences of self-reported leisure-time physical activity (≥3 kcal·kg^{-1}·day^{-1} (kkd)) were calculated, and unadjusted and adjusted (age, income, education, BMI) multiple logistic regression models were used to quantify the odds of being physically active (PA) (≥3 kkd) by time since immigration (recent immigrant ≤10 yrs, immigrant >10 yrs, non-immigrant) within and between ethnic groups (White referent group).

Results: The prevalence of recent immigrants (≤10 yrs) being PA (≥3 kkd) by ethnicity was: White (21%), Other (19%), Black (19%), Latin American (17%), West Asian/Arab (16%), East/Southeast Asian (14%), South Asian (11%). Recent immigrant Black men and White women had the highest prevalence of being PA (M=27%, F=18%) while South Asian men and women had the lowest prevalence (M=14%, F=9%). There is a gradient in the prevalence of being PA with recent immigrants (16%) < immigrants (20%) < non-immigrants (24%). Ethnic differences in the prevalence of being PA by time since immigration show similar patterns for men and women. Controlling for age, income, education and BMI had only small effects on the odds of being physical active across ethnicities and immigrant status.

Conclusion: These results suggest that physical activity levels vary according to immigrant status and self-ascribed ethnicity in Canadian adults. Strategies to promote physical activity and prevent physical inactivity should consider both ethnicity and time since immigration.

MeSH terms: Immigrant; race; ethnicity; exercise; epidemiology

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

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There is unequivocal evidence demonstrating a positive relationship between physical activity (PA) and health.[1,2] The health benefits of regular PA include a reduced risk of type 2 diabetes, cardiovascular disease and some cancers, and a lower risk of premature mortality.[1,2] Despite this evidence, a large proportion of the Canadian population lives a sedentary lifestyle.[3,4] According to the 2000/01 Canadian Community Health Survey, only 21% of Canadians aged 12 years and older were considered active enough for optimal health benefits (expending ≥3.0 kcal·kg^{-1}·day^{-1} (kkd)).[5] Furthermore, an increasing proportion of Canadians are obese,[6] and there is convincing evidence that regular PA is protective against obesity.[7] The high prevalence of physical inactivity represents a significant economic burden, estimated to account for $5.3 billion, or 2.6% of total health expenditures in 2001.[8]

Physical inactivity has evolved to be an important public health issue in Canada. This is highlighted by the Federal and Provincial/Territorial commitment to increase the proportion of Canadians meeting a minimal threshold of physical activity by 10 percentage points in each province and territory by the year 2010.[9] Further, the Ministers agreed to focus efforts on targeted groups such as children and youth, women and girls, low-income individuals, Aboriginal Peoples, persons with disabilities and older Canadians.[9] Absent from this list was any reference to immigrant groups. This is a particularly important sector of Canadian society because it is large (18.4% of population), growing (highest level in 70 years) and changing (proportionally more Asians).[10]

National surveys have consistently shown that PA levels vary by age, sex, socioeconomic status and geography.[1,3,6,11,12] However, few data are available describing the PA behaviours among specific ethnic groups in Canada. This lack of knowledge is primarily the result of an absence of data. The Canadian Community Health Survey (CCHS) collects health information on approximately 130,000 Canadians every second year, providing a sample size large enough to allow for estimates of important health indicators by self-ascribed ethnicity and immigrant status.

The immigrant population in Canada is diverse and growing, yet little is known

about their PA behaviour and how it changes as they adapt to a Canadian lifestyle. Tremblay et al.[13] demonstrated that the odds of being overweight or obese increase with time since immigration, suggesting that PA levels may decrease as immigrants become acculturated. These results are reinforced by evidence demonstrating decreased PA and fitness among people undergoing socio-economic and cultural transitions towards developed country standards.[14-17] Recent evidence indicates significant variation in PA levels among ethnic groups and this variation may confound any effect of acculturation.[18]

The purpose of this study is to extend the surveillance of PA in Canada to include the influence of time since immigration within and between ethnic groups. We hypothesized that immigrants would be less active than recent immigrants but that this relationship would vary across different ethnicities.

METHODS

This analysis is based on cycles 1.1 (2000/01) and 2.1 (2003) of Statistics Canada's CCHS. The CCHS collects cross-sectional information about the health of Canadians every two years. The survey covers the household population aged ≥12 in all provinces and territories, except persons living on Indian reserves, on Canadian Forces bases, in institutions (prisons, hospitals, universities) and in some remote areas. A detailed description of the CCHS design, sample and interview procedures can be found elsewhere.[19] After restricting the cycles to respondents aged 20 to 64 years with non-missing energy expenditure values, the sample sizes for each year were 84,749 for 2000/01 and 86,764 for 2003. Combined, this created a single unweighted sample of 171,513, representing data collected between 2000 and 2003.

Self-ascribed ethnicity from the CCHS was used to classify respondents into the following eight ethnic categories according to procedures previously described:[13] White; East or Southeast Asian; West Asian or Arab; South Asian; Latin American; Black; North American Aboriginal; and Other. For the purpose of this paper, the term "ethnicity" is used to represent race or ethnicity using the previously listed categories, however, when citing supporting literature, loyalty to the terminology used in the cited source is preserved. Immigrant status was determined by asking respondents in what country they were born. Those specifying a country other than Canada were then asked if they were born a Canadian citizen. Those who said "no" were determined to be immigrants. Immigrant respondents were then asked in what year they immigrated to Canada. Comparing the response to the year of interview allowed for a derivation of time since immigration. Immigrants were then categorized into recent immigrants (≤10 yrs) or immigrants (>10 yrs). The weighted prevalence of non-immigrants, recent immigrants, and immigrants in the analysis was 79.5%, 6.2% and 14.3% respectively. North American Aboriginals were not included as immigrants in the analysis.

Level of PA was derived from respondents' questionnaire responses on leisure time PA participation. From a list of physi-

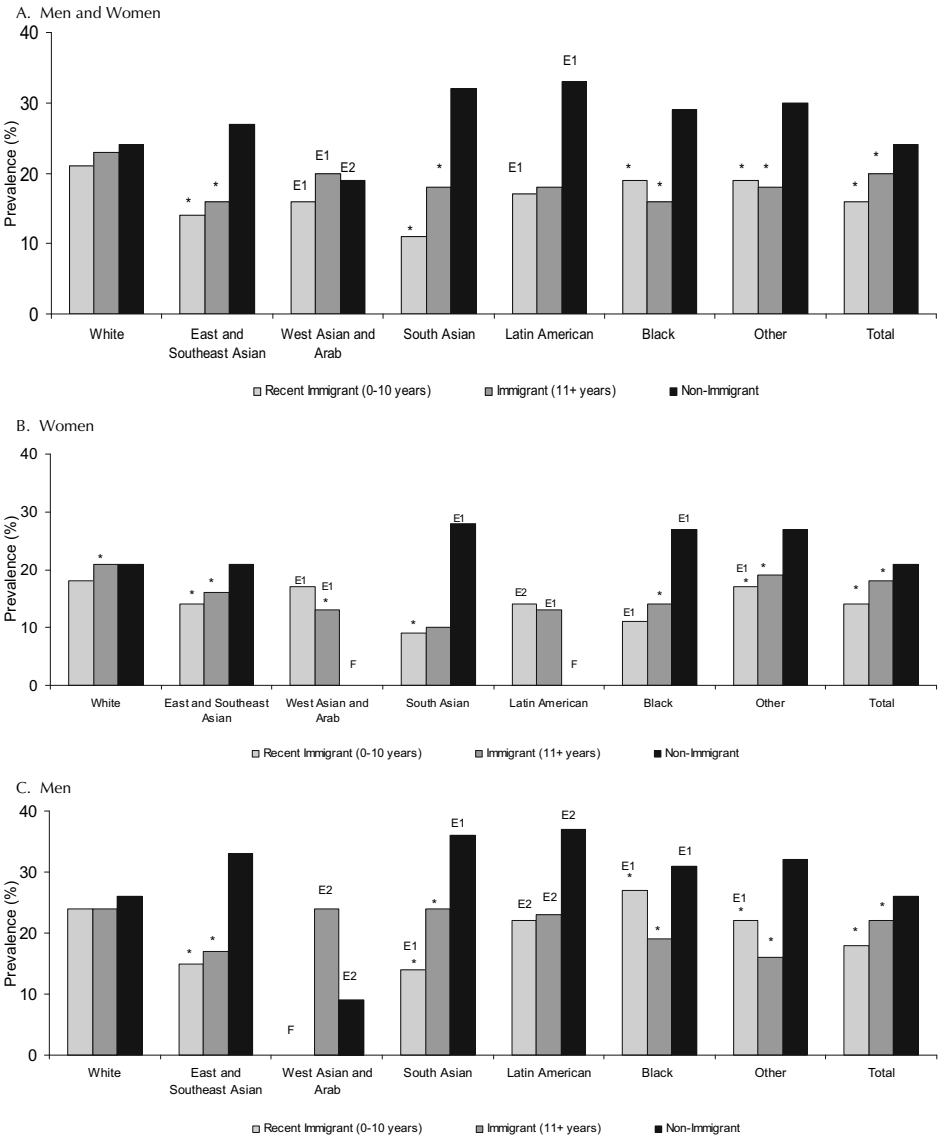

Figure 1. Prevalence of self-reported, leisure-time moderate-to-high physical activity (≥3 kkd) in 20-64 year-old women and men from CCHS Cycles 1.1 and 2.1 by immigrant status within various ethnic groups.
Three immigrant status categories are plotted for each ethnic group. Panel A presents women and men combined, Panel B presents women only, and Panel C presents men only.
* Significantly different from estimate for "non-immigrant" group ($p<0.05$). E1 Coefficient of variation (CV) falls between 16.6% and 25.0%; E2 CV falls between 25.1% and 33.3%; F CV is above 33.3% and estimate has been suppressed.

TABLE I

Odds Ratios (95% Confidence Intervals) for Being Moderately (≥1.5 kkd) Physically Active, by Time Since Immigration. Canadian Population Aged 20-64 years, 2000-2003

	Recent Immigrants (≤10 y)		Immigrants (>10 y)		Non-Immigrants	
	Unadjusted Odds Ratio	Adjusted Odds Ratio‡	Unadjusted Odds Ratio	Adjusted Odds Ratio‡	Unadjusted Odds Ratio	Adjusted Odds Ratio‡
Overall						
White†	1.0	1.0	1.0	1.0	1.0	1.0
Latin American	0.6* (0.4-0.8)	0.8 (0.5-1.1)	0.7* (0.5-0.9)	0.7* (0.5-1.0)	1.2 (0.6-2.4)	0.8 (0.3-1.9)
Other§	0.8 (0.5-1.1)	0.9 (0.6-1.3)	0.7* (0.6-0.9)	0.6* (0.5-0.8)	1.4* (1.2-1.6)	1.3* (1.2-1.5)
West Asian or Arab	0.5* (0.4-0.7)	0.6* (0.4-0.8)	0.7 (0.5-1.0)	0.7* (0.4-1.0)	0.9 (0.5-1.9)	0.9 (0.4-2.1)
Black	0.7* (0.5-1.0)	0.9 (0.6-1.3)	0.5* (0.4-0.6)	0.5* (0.4-0.7)	1.1 (0.8-1.6)	0.9 (0.7-1.3)
South Asian	0.4* (0.3-0.5)	0.5* (0.4-0.6)	0.6* (0.5-0.7)	0.6* (0.5-0.7)	1.5 (1.0-2.2)	1.3 (0.8-1.9)
East or Southeast Asian	0.6* (0.5-0.7)	0.7* (0.5-0.8)	0.7* (0.6-0.8)	0.6* (0.6-0.7)	1.0 (0.8-1.2)	0.9 (0.7-1.1)
Aboriginal					0.9 (0.8-1.0)	1.1 (1.0-1.3)
Men						
White†	1.0	1.0	1.0	1.0	1.0	1.0
Latin American	0.6 (0.3-1.2)	0.9 (0.5-1.8)	0.8 (0.6-1.3)	0.9 (0.6-1.4)	0.8 (0.3-2.2)	0.4 (0.1-2.3)
Other§	0.6 (0.4-1.0)	0.7 (0.4-1.2)	0.7* (0.5-0.9)	0.7* (0.5-0.9)	1.3* (1.1-1.6)	1.2 (1.0-1.5)
West Asian or Arab	0.6* (0.4-0.9)	0.7 (0.4-1.2)	0.7 (0.5-1.1)	0.6 (0.4-1.1)	1.1 (0.4-3.2)	1.0 (0.3-3.0)
Black	1.1 (0.7-1.9)	1.2 (0.7-2.1)	0.6* (0.5-0.9)	0.7* (0.5-0.9)	1.4 (0.9-2.3)	1.2 (0.7-2.0)
South Asian	0.5* (0.3-0.7)	0.6* (0.4-0.8)	0.8 (0.6-1.1)	0.8 (0.6-1.0)	1.8* (1.0-3.0)	1.7 (1.0-3.0)
East or Southeast Asian	0.6* (0.5-0.8)	0.7* (0.5-0.9)	0.6* (0.5-0.8)	0.6* (0.5-0.7)	1.2 (0.9-1.6)	0.9 (0.7-1.3)
Aboriginal					1.0 (0.9-1.2)	1.2* (1.0-1.5)
Women						
White†	1.0	1.0	1.0	1.0	1.0	1.0
Latin American	0.5* (0.3-0.9)	0.7 (0.4-1.1)	0.6* (0.4-0.9)	0.6* (0.4-0.9)	1.7 (0.6-4.3)	1.2 (0.4-3.2)
Other§	0.9 (0.5-1.4)	1.1 (0.6-1.8)	0.7 (0.5-1.0)	0.6* (0.4-0.8)	1.5* (1.3-1.8)	1.5* (1.2-1.9)
West Asian or Arab	0.4* (0.2-0.8)	0.4* (0.2-0.7)	0.7 (0.4-1.2)	0.7 (0.4-1.3)	0.8 (0.3-1.9)	0.9 (0.3-2.6)
Black	0.4* (0.3-0.7)	0.7 (0.4-1.1)	0.5* (0.3-0.6)	0.4* (0.3-0.6)	0.7 (0.4-1.2)	0.8 (0.5-1.3)
South Asian	0.3* (0.2-0.4)	0.4* (0.3-0.6)	0.4* (0.3-0.6)	0.5* (0.4-0.6)	1.2 (0.7-2.0)	0.9 (0.5-1.7)
East or Southeast Asian	0.6* (0.5-0.8)	0.6* (0.4-0.9)	0.7* (0.6-0.8)	0.7* (0.6-0.8)	0.9 (0.7-1.2)	0.8 (0.6-1.1)
Aboriginal					0.9* (0.8-1.0)	1.1 (0.9-1.2)

Data source: The Canadian Community Health Survey, cycles 1.1 (2000/01) and 2.1 (2003) pooled
* Significantly different from reference category, p<0.05
† Reference category
‡ Adjusted for age, educational attainment, household income and body mass index
§ includes multiple groups or unknown

cal activities, respondents indicated the number of times they engaged in the activity and the average duration of the session. These data were used together with the MET value associated with the activity to derive an energy expenditure value for each respondent, expressed in kkd. PA level was categorized as moderately active (≥1.5 kkd) or moderately to highly active (≥3.0 kkd).

Body mass index (BMI) categories were assigned according to Health Canada guidelines, which are applicable to the non-pregnant, non-lactating population aged 18 and older.[20] BMI was calculated as the ratio weight (kg)/height^2 (m). Respondents with a BMI ≥30 kg/m^2 were considered obese while those with a BMI ≥25 kg/m^2 were considered overweight (overweight includes obesity).

Household income groups depended on total income and household size and were categorized using previously established Statistics Canada income categories.[21,22] Educational attainment was grouped into four levels: less than secondary school graduation, secondary school graduation (no post-secondary education), some post-secondary education, and post-secondary degree/diploma.

The weighted prevalence of adults (20-64 yrs) who reported being physically active (moderate, ≥1.5 kkd; moderate to high, ≥3.0 kkd) was calculated for recent immigrants, immigrants and non-immigrants, by ethnicity. Logistic regression models were constructed to determine unadjusted and adjusted (for age, education, household income, and BMI classification level) odds ratios assessing the probability of being physically active according to immigrant status, for each ethnic group. For the logistic regression analysis, age was categorized into 3 groups (20-34 y, 35-49 y, and 50-64 y). Records with missing values for the independent variables were dropped. Respondents reporting an ethnicity of North American Aboriginal (29 records) were dropped. Coefficients of variation and p-values were estimated and significance tests were performed using the bootstrap technique, to account for the survey design effect.[23-25] The significance level was set at p<0.05.

RESULTS

The stratification of ethnic groups by recent immigrant (≤10 y), immigrant (>10 y) and non-immigrant indicates that the prevalence of adults who report being moderately to highly active (≥3.0 kkd) tends to increase with time since immigration and is persistently higher in non-immigrants (Figure 1A). Overall, the largest differences in the prevalence of moderate to high PA between immigrants and non-immigrants were found in Latin Americans (17% vs. 33%)(Figure 1A). The largest differences between recent immigrants and immigrants were found in South Asian men (14% vs. 24%)(Figure 1C), although there were no differences in South Asian women (9% vs. 10%)(Figure 1B). With Blacks, there are also some differences in the relationship between immigrant status and the prevalence of moderate PA between sexes (Women: recent immigrants = immigrants < non-immigrants; Men: immigrants < recent immigrants < non-immigrants). In general, female immigrants in all ethnic groups are less active than male immigrants regardless of time since immigration.

White immigrants are generally more active than immigrants of other ethnicities but this relationship is not evident among non-immigrants, where the pattern is similar for men and women (Table I). Black,

TABLE II

Odds Ratios (95% Confidence Intervals) for Being Moderately to Highly (≥3 kkd) Physically Active, by Time Since Immigration (20 to 64 years), Canada, 2000-2003

	Recent Immigrants (≤10 y)		Immigrants (>10 y)		Non-Immigrants	
	Unadjusted Odds Ratio	Adjusted Odds Ratio‡	Unadjusted Odds Ratio	Adjusted Odds Ratio‡	Unadjusted Odds Ratio	Adjusted Odds Ratio‡
Overall						
White†	1.0	1.0	1.0	1.0	1.0	1.0
Latin American	0.8 (0.5-1.3)	1.0 (0.6-1.6)	0.8 (0.5-1.1)	0.8 (0.5-1.2)	1.6 (0.8-3.1)	0.9 (0.4-2.3)
Other§	0.9 (0.6-1.3)	1.0 (0.6-1.6)	0.7* (0.6-0.9)	0.6* (0.5-0.8)	1.4* (1.2-1.6)	1.3* (1.1-1.5)
West Asian or Arab	0.7 (0.5-1.2)	0.6 (0.4-1.1)	0.9 (0.6-1.4)	0.8 (0.5-1.4)	0.7 (0.3-1.6)	0.6 (0.3-1.5)
Black	0.9 (0.6-1.3)	1.0 (0.7-1.6)	0.7* (0.5-0.8)	0.7* (0.5-0.9)	1.3 (0.9-1.8)	1.1 (0.7-1.6)
South Asian	0.5* (0.4-0.7)	0.6* (0.4-0.9)	0.7* (0.6-0.9)	0.7* (0.6-0.9)	1.5* (1.0-2.3)	1.5* (1.0-2.3)
East or Southeast Asian	0.6* (0.5-0.8)	0.7* (0.6-0.9)	0.7* (0.6-0.8)	0.6* (0.5-0.8)	1.2 (1.0-1.5)	1.0 (0.8-1.2)
Aboriginal					1.2 (1.0-1.3)	1.3* (1.1-1.5)
Men						
White†	1.0	1.0	1.0	1.0	1.0	1.0
Latin American	0.9 (0.4-1.9)	1.4 (0.6-3.0)	1.0 (0.6-1.5)	0.9 (0.6-1.6)	1.6 (0.5-5.0)	1.2 (0.2-8.1)
Other§	0.9 (0.5-1.6)	1.0 (0.5-1.8)	0.6* (0.5-0.9)	0.6* (0.4-0.8)	1.3* (1.1-1.6)	1.2 (1.0-1.5)
West Asian or Arab	0.6 (0.3-1.1)	0.7 (0.4-1.4)	1.0 (0.6-1.8)	0.9 (0.5-1.8)	0.3* (0.1-0.9)	0.2* (0.1-0.8)
Black	1.2 (0.7-2.0)	1.2 (0.7-2.0)	0.7 (0.5-1.1)	0.7 (0.5-1.1)	1.2 (0.8-2.0)	1.0 (0.6-1.6)
South Asian	0.5* (0.3-0.8)	0.7 (0.4-1.1)	1.0 (0.8-1.3)	0.9 (0.7-1.2)	1.6 (0.9-2.7)	1.6 (0.9-2.9)
East or Southeast Asian	0.6* (0.4-0.8)	0.6* (0.4-0.9)	0.7* (0.5-0.9)	0.6* (0.5-0.8)	1.4 (1.0-1.9)	1.0 (0.7-1.5)
Aboriginal					1.3* (1.1-1.6)	1.5* (1.2-1.9)
Women						
White†	1.0	1.0	1.0	1.0	1.0	1.0
Latin American	0.7 (0.4-1.4)	0.8 (0.4-1.7)	0.6* (0.3-1.0)	0.6 (0.3-1.2)	1.6 (0.7-4.0)	0.8 (0.3-2.3)
Other§	0.9 (0.5-1.7)	1.0 (0.5-2.1)	0.9 (0.6-1.3)	0.7 (0.5-1.2)	1.4* (1.2-1.7)	1.4* (1.2-1.8)
West Asian or Arab	0.9 (0.4-2.2)	0.5* (0.2-1.0)	0.5 (0.3-1.1)	0.6 (0.3-1.4)	1.7 (0.6-4.5)	1.8 (0.6-5.3)
Black	0.6 (0.3-1.0)	0.8 (0.4-1.6)	0.6* (0.4-0.9)	0.7* (0.4-1.0)	1.4 (0.9-2.2)	1.3 (0.7-2.2)
South Asian	0.4* (0.3-0.7)	0.5* (0.3-0.9)	0.4* (0.3-0.6)	0.5* (0.3-0.7)	1.4 (0.8-2.5)	1.4 (0.8-2.6)
East or Southeast Asian	0.7* (0.5-1.0)	0.7 (0.5-1.1)	0.7* (0.5-0.9)	0.6* (0.5-0.8)	1.0 (0.8-1.3)	0.9 (0.6-1.2)
Aboriginal					1.0 (0.9-1.2)	1.2 (1.0-1.5)

Data source: The Canadian Community Health Survey, cycles 1.1 (2000/01) and 2.1 (2003) pooled
* Significantly different from reference category, $p<0.05$
† Reference category
‡ Adjusted for age, educational attainment, household income and body mass index
§ includes multiple groups or unknown

South Asian, and East or Southeast Asian immigrants are less active than White immigrants and the reverse relationship is observed among non-immigrants. In general, correcting for age, education, income and BMI produced only small changes to the odds ratios.

Similar patterns from Table I are noted when a more rigorous definition for PA is utilized (≥3.0 kkd)(Table II). A notable exception is that West Asian or Arab non-immigrant men have an 80% lower odds of being moderately to highly active compared to White non-immigrants and also have lower odds compared to West Asian or Arab recent immigrants and immigrants.

DISCUSSION

PA in relation to immigrant status has not been extensively examined in Canada, yet is important for the development of appropriate public health initiatives. Pérez examined the health status and health behaviours among immigrants and found that, in general, immigrants had superior health compared to non-immigrants.[22] In contrast to this general finding, Pérez reported that immigrants were less likely to be physically active compared to non-immigrants.[22] Our study also demonstrated this gradient. Recent immigrants (16%) were less active than immigrants (20%) who were less active than non-immigrants (24%). While time in Canada appears to increase the probability of being physically active during leisure time, previous work has shown that the "healthy immigrant effect" decreases with increased time since immigration[22] and the prevalence of overweight increases.[13] Collectively these findings suggest that, with an increase in time since immigration, the caloric intake of immigrants may increase disproportionately to the increase in leisure-time PA, or that the increases in leisure-time PA are offset by decreases in occupational or non-leisure-time PA, leading to a progressive increase in BMI.

Comparable information from the United States demonstrates a similar healthy immigrant effect and also shows that the acculturation process precipitates chronic disease morbidity.[26] Similar to our findings, recent evidence from the United States found a positive association between participation in leisure-time PA and acculturation among Mexican Americans.[27] Despite this trend, and similar to our observations, the prevalence of obesity in US immigrants tends to increase with time since immigration.[28]

The observation that South Asian and East and Southeast Asian adults are less active than Whites appears in conflict with the results of Tremblay et al.,[13] who demonstrated that South Asians and East and Southeast Asians had much lower levels of obesity compared to Whites. However, it is now known that Asian populations have an increased body fat for a given BMI.[29] Although the mechanisms explaining this are complex and poorly understood, our study provides support for the possibility that a lower lean body mass resulting from low habitual PA may help explain this ethnic peculiarity. A recent longitudinal analysis of immigrants' health found that non-European immigrants were almost twice as likely as those born in Canada to have substantial weight gain over an eight-year period.[30] So, although the probability of being overweight or

obese may remain lower in Asian immigrants, the probability of substantial weight gain may still be greater, which is consistent with our findings of lower levels of PA. Also, the measure of PA in this analysis captures only leisure-time PA levels, and obesity is related to total daily energy balance. The absence of information on occupational PA may partially explain the apparent conflicts between obesity and PA results. Data from the United States indicate that high levels (≥5 hours/day) of "hard" occupational activity were higher in Mexican Americans (33%) and Black Americans (30%) by comparison to White Americans (22%).[31] Future studies addressing the interaction between PA and obesity among ethnic groups should include more precise measures of energy expenditure.

The findings in this study need to be interpreted with caution because they are based on self-reported leisure-time PA. Self-reported PA is susceptible to misinterpretation and bias, particularly among culturally diverse populations.[32] Furthermore, only superficial information is available about non-leisure-time PA and ethnic differences in occupation, active transportation and domestic chores could significantly affect these findings. Finally, from this analysis we do not know the degree to which cohort effects influenced the results (e.g., differences in age at immigration across ethnicities).

The pattern of lower levels of PA among recent immigrants in Canada was observed in the 1994-95 National Population Health Survey,[33] the 2000-01 CCHS,[22,34] and now our results based on pooled data from the CCHS. This consistent observation demonstrates the need to provide PA opportunities targeted at recent immigrants. The increasing risk of overweight and obesity the longer immigrants are in Canada[13] suggests that the level of leisure-time activity achieved by immigrants and non-immigrants is likely insufficient to maintain healthy body weights. Consequently, attention should be given to enhancing health-promoting behaviours in recent immigrants in an effort to maintain or enhance their healthy immigrant status.

In summary, this study demonstrated that PA levels vary according to immigrant status between and within ethnic groups in Canada. Strategies to promote PA and prevent physical inactivity should consider both ethnicity and time since immigration. Exploration of family and employment situational variables, including non-leisure-time PA behaviour, should be the focus of future research in this area.

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RÉSUMÉ

Contexte : La population immigrante au Canada est diversifiée et ne cesse de croître, mais on sait peu de choses au sujet de son comportement en matière d'activité physique ou sur les modifications qu'on y apporte à mesure que l'on s'adapte au mode de vie canadien. L'étude élargit la surveillance de l'activité physique au Canada en vue d'inclure l'influence de la période écoulée depuis l'immigration, à l'intérieur de groupes ethniques et entre ces groupes.

Méthode : Pour cette étude, nous avons utilisé des données regroupées des cycles 1.1 (2000-2001) et 2.1 (2003) de l'Enquête transversale sur la santé dans les collectivités canadiennes (personnes âgées de 20 à 64 ans; N=171 513). Des prévalences pondérées de l'activité physique autodéclarée durant les loisirs (≥3 kcal·kg^{-1}·jour^{-1} [KKJ]) ont été calculées, et des modèles de régression logistique multiple rajustés et non rajustés (selon l'âge, le revenu, la scolarité, l'IMC) ont servi à quantifier la cote exprimant la probabilité d'être physiquement actif (≥3 KKJ), selon la période écoulée depuis l'immigration (nouveaux immigrants [≤10 ans], immigrants depuis plus de 10 ans, non-immigrants), à l'intérieur de groupes ethniques et entre ces groupes (le groupe de référence était de race blanche).

Résultats : La prévalence de l'activité physique (≥3 KKJ) chez les nouveaux immigrants selon l'origine ethnique était la suivante : Blancs (21 %), Autres (19 %), Noirs (19 %), Latino-Américains (17 %), Asiatiques de l'Ouest/Arabes (16 %), Asiatiques de l'Est/du Sud-Est (14 %), Asiatiques du Sud (11 %). Les nouveaux immigrants de race noire et de sexe masculin et les femmes de race blanche avaient la prévalence la plus forte d'être physiquement actifs (H=27 %, F=18 %), tandis que les hommes et les femmes sud-asiatiques avaient la prévalence la plus faible (H=14 %, F=9 %). Il existe un gradient dans la prévalence d'être physiquement actif : nouveaux immigrants (16 %) < immigrants (20 %) < non-immigrants (24 %). Les différences ethniques dans la prévalence d'être physiquement actif selon la période écoulée depuis l'immigration montrent des tendances similaires pour les hommes et les femmes. Le fait de contrôler l'âge, le revenu, le niveau de scolarité et l'IMC n'a eu que peu d'effet sur la cote exprimant la probabilité d'être physiquement actif selon l'origine ethnique et le statut d'immigrant.

Conclusion : Ces résultats laissent supposer que les niveaux d'activité physique varient selon le statut d'immigrant et l'origine ethnique autodéclarée des adultes canadiens. Les stratégies pour promouvoir l'activité physique et prévenir la sédentarité devraient donc tenir compte de l'origine ethnique et de la période écoulée depuis l'immigration.

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