Sedentary behaviours among adults across Canada

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ABSTRACT

OBJECTIVES: While cross-Canada variations in physical activity and weight status have been illustrated, less is known about sedentary behaviour (SB). The aim of this study was to describe various SBs and their correlates among Canadian adults.

METHODS: Cross-sectional data from the 2011–2012 Canadian Community Health Survey included 92,918 respondents aged 20–75+ years, representative of >22 million Canadian adults. TV/video viewing, computer, video game playing and reading time were self-reported. Associations with socio-demographic, health and health behaviour variables were examined.

RESULTS: About 31% of adults reported >2 hours/day TV viewing, while 47% of men and 41% of women reported >5 hours/week computer use, 24% of men and 12% of women reported ≥1 hour/week video game playing, and 33% of men and 46% of women reported >5 hours/week reading; 28% of respondents reported ≥5 hours/day total SB time. Age was the strongest correlate: adults 75+ had 5 and 6 times greater odds respectively of reporting >2 hours/day TV viewing and >5 hours/week reading, but far lesser odds of reporting high computer or video game time, compared to adults 20–24. Other variables associated with specific SBs included gender, marital status, education, occupation, income and immigrant status, as well as BMI, weight perceptions, smoking, diet and physical activity.

CONCLUSION: Common sedentary behaviours were associated with numerous socio-demographic, health and health behaviour characteristics in a large representative sample of Canadians. These correlates differed according to the type of SB. Public health interventions targeting SB should be behaviour-specific and tailored to the population segment of interest.

KEY WORDS: Screen time; reading; television; computer; physical activity; obesity

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

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Sedentary behaviour (SB) refers to any waking behaviour with a low energy expenditure (≤ 1.5 metabolic equivalents of task; METs) while in a sitting or reclining posture.¹ SB is a distinct construct, associated with negative health outcomes and mortality independently from the health benefits of physical activity (PA).^{2–4} Screen time (ST), including TV viewing, video game playing and leisure time computer use, is a common metric of SB; other behaviours include time spent sitting, reading or in passive transportation. Rather than being detrimental to health, some behaviours such as reading or other productive or mentally-active SBs have shown no association or positive associations with health outcomes.^{5–7} Currently unknown is how much time Canadians spend engaging in different SB modalities, or how these behaviours differ by geographic region and socio-demographic and health characteristics.

Data from the 2007 Canadian Community Health Survey (CCHS) showed that 29% of Canadian adults aged 20–75+ watched ≥15 hours/week (>2 hours/day) TV, and 29% spent >5 hours/week using a computer.⁸ Socio-demographic correlates of TV and computer time were noted; however, associations with health characteristics and behaviours were not assessed. Further, total ST, non-screen SBs, and total SB time were not described. Also from the 2007 data, significant associations were reported among both TV viewing and computer use and obesity, but no association with reading time, corroborating that SB modality is relevant.⁹ A recent systematic review described socio-demographic and health

correlates of SB among adults, highlighting the specificity of behaviours and population-dependent differences.¹⁰

The 2011/2012 CCHS is the most recent cycle to include the SB module for all provinces and territories, permitting a comprehensive assessment of how these behaviours vary across Canada, and across specific characteristics of the Canadian population. Our objectives were to provide an updated characterization of SB among adults across Canada, a) including measures of total ST, reading time, and total SB time, in addition to TV/video viewing and computer use; and b) assessing a more comprehensive list of potential correlates spanning socio-demographic, health and health behaviour variables.

METHODS

Sample

The sample was from the CCHS 2011/2012 public use microdata file. In-depth methodology is published elsewhere.¹¹ Briefly, the CCHS is a cross-sectional survey conducted by Statistics Canada, collecting information on health status, health determinants and

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health system utilization for the Canadian population. Using computer-assisted interviews (in-person, telephone), the CCHS targets persons ≥ 12 years of age living in private dwellings in the 10 provinces and 3 territories, covering 98% of the population; individuals living on Indian Reserves or Crown Lands, institutional residents, full-time Canadian Forces members, and residents of certain remote regions are excluded. The combined 2011/2012 response rate was 68.4% at the Canadian population level: of 183,721 households selected, 144,000 responded (78% household-level response rate), and of 144,000 individuals (one per household) selected, 125,645 valid interviews were conducted (87% person-level response rate). Informed consent was obtained by Statistics Canada, in accordance with Canadian federal legislative requirements. The current analytic sample included 92,918 respondents (50% female) aged 20–75+ years with complete data for all study variables, representing >22 million Canadians.

Measures

Sedentary Behaviours

The questions used to determine time spent in each SB modality, and response categories available to participants, are listed in Table 1. TV/Video Viewing Time and Total Screen Time were dichotomized at ≤ 2 hours/day versus > 2 hours/day as is common in the literature.³ In the absence of consistent norms in the literature, Computer Time (≤ 5 hours/week versus > 5 hours/week), Video Game Playing Time (< 1 hour/week versus ≥ 1 hour/week), Reading Time (≤ 5 hours/week versus > 5 hours/week), and Total SB (< 5 hours/day versus ≥ 5 hours/day) were reduced to dichotomous variables based on their distribution across categories, striving for an approximately equal proportion of respondents above and below the cut-offs. For video game playing, as the vast majority of respondents outside of the youngest age group reported < 2 hours/week, the only feasible option for meaningful comparisons was to dichotomize at < 1 versus ≥ 1 hour per week.

Socio-demographic, Health and Health Behaviour Correlates

Socio-demographic characteristics included Age; Marital status (married, common law, widowed/separated/divorced, single/never married); Education ($<$ high school, high school graduate, some post-secondary, post-secondary graduate); Occupation (management/

health/education/art/culture, business/finance/administration, sales/service, trades/transportation/equipment operating, primary industries/processing/manufacturing); Income ($< \$40K$, $\$40K$ – $\$80K$, $\geq \$80K$); Province of residence; Immigrant status (non-immigrant, 0–9 years, ≥ 10 years); and Race/Ethnicity (white, visible minority). Highest household education described respondents aged 20–24, while highest respondent education described those aged ≥ 25 . Occupational group was included only for respondents aged 25–54 ($n = 34,195$ unweighted).

BMI was calculated as weight (kg) per height (m^2) from self-reported height and weight, and participant *weight status* was classified as underweight, normal weight, overweight or obese.¹² *Perceived Weight Status* was ascertained by asking respondents “Do you consider yourself: (overweight, underweight or just about right)?”.

Physical Activity (PA) was assessed using an adaptation of the Minnesota Leisure Time Physical Activity Questionnaire.¹³ Respondents were asked about their participation in 21 specified activities, plus up to 3 additional volunteered activities, indicating participation frequency in the past 3 months and average session duration. An estimate of average daily energy expended during leisure time PA is calculated, given in kilocalories per kilogram per day (KKD). The CCHS categorizes respondents as active (≥ 3.0 KKD), moderately active (1.5–2.9 KKD) or inactive (< 1.5 KKD), whereby 3.0 KKD reflects, on average, the equivalent of 60 minutes/day of moderate-intensity activity.¹⁴

Smoking Status was assessed by asking respondents “At the present time do you smoke cigarettes daily, occasionally or not at all?” and classified into daily, occasional or never smokers.

Fruit and Vegetable Consumption: As an indicator of overall healthy nutrition, fruit and vegetable consumption was assessed via a series of food frequency questions. The CCHS pre-derives and categorizes total consumption as < 5 /day, 5–10/day, and > 10 /day.

Analysis

Descriptive statistics were tabulated and weighted prevalences calculated, estimating the proportion of Canadian adults reporting high levels of SBs, according to socio-demographic, health and health behaviour categories. Odds ratios (95% CIs) for high SB were determined using multivariable logistic regression, including in the

Table 1. Questions used to determine time spent in each SB modality, and response categories available to participants, Canadian Community Health Survey 2011–2012

Sedentary behaviour	Question	Response categories
TV/video viewing time	“In a typical week in the past 3 months, how much time did you usually spend watching television or videos?”	0–1, 1–2, 3–5, 6–10, 11–14, 15–20, 22–25, 26–30, > 30 hours/week
Computer time	“In a typical week in the past 3 months, how much time did you usually spend on a computer, including playing computer games and using the Internet? (not including time spent at work or at school)?”	0–1, 1–2, 3–5, 6–10, 11–14, 15–20, > 20 hours/week
Video game playing time	“In a typical week in the past 3 months, how much time did you usually spend playing video games, such as XBOX, Nintendo and Playstation?”	0–1, 1–2, 3–5, 6–10, 11–14, 15–20, > 20 hours/week
Reading time	“In a typical week in the past 3 months, how much time did you usually spend reading, not counting at work or at school? Include books, magazines, newspapers, homework.”	0–1, 1–2, 3–5, 6–10, 11–14, 15–20, > 20 hours/week
Total screen time	<i>Pre-calculated and categorized in the CCHS as the sum of all of TV/Video, Computer, and Video Game time.</i>	< 5 , 5–9, 10–14, 15–19, 20–24, 25–29, 30–34, 35–39, 40–44, > 45 hours/week
Total sedentary behaviour	<i>Pre-calculated and categorized in the CCHS as the sum of all of TV/Video, Computer, Video Game and Reading time.</i>	< 5 , 5–9, 10–14, 15–19, 20–24, 25–29, 30–34, 35–39, 40–44, > 45 hours/week

models all significant correlates from the bivariate analysis. Analyses for occupational category were restricted to respondents aged 24–54 ($n = 34,195$); all other analyses included all respondents ages ≥ 20 while excluding occupational category from the model.

Data were weighted to calculate Canadian population summary statistics. To produce more reasonable 95% CIs taking into account the unequal probabilities of selection, the provided weights were re-scaled to a mean weight of one (1) as per Statistics Canada guidelines,¹¹ using in the analysis a weight equal to the original weight divided by the mean of the original weights for the sampled units ($n = 92,918$; $n = 34,195$ for occupational categories) contributing to the analysis.

Analyses were completed using IBM SPSS Statistics v. 21.0 (IBM, Armonk, NY, USA).

RESULTS

Sample descriptive characteristics are shown in Table 2. Among Canadian adults, 61% of males and 45% of females were classified as overweight/obese by self-reported height and weight, and 1 in 4 adults was classified as “active”. With respect to SB modalities (Figure 1), 44% of adults reported >5 hours/week leisure computer use, 31% reported >2 hours/day TV/video viewing, 18% reported ≥ 1 hour/week video game playing, and 40% reported >5 hours/week reading. Males were significantly more likely than females to report high computer use and video game playing time, while females were more likely than males to report high reading time; no gender difference was present for TV viewing time. Over 60% of adults reported >2 hours/day total ST, and 28% reported ≥ 5 hours/day total SB time.

Socio-demographic correlates of SB

In both bivariate and multivariate analyses (Tables 3 and 4), the strongest correlate associated with all SBs was age (Figure 1). For computer use, a clear diminishing trend by age was seen whereby 3.5 times more adults aged 20–24 used computers >5 hours/week compared to those aged 75+. Higher computer use was also associated with male gender, single/never married, higher education, management/health/education/art/culture occupations, higher income, and recent immigrant and visible minority statuses. Alberta and British Columbia residents had the highest provincial prevalence of higher computer use, and those residing in Quebec the lowest (note: sample age distribution was similar across provinces). Higher video game playing time was also substantially more common among younger adults, as well as among males, single/never married or common law, business/finance/administration occupations, non-immigrants and Manitoba and Alberta residents.

By contrast, TV viewing >2 hours/day was most likely among older adults (e.g., ages 75+ had 5 times greater odds of reporting >2 hours/day vs. ages 20–24), and for single/never married or common law, less educated, non-white-collar occupation, lower income and non-immigrants. In bivariate analyses, females reported more TV viewing than males, whites more than visible minorities, and the highest TV time was among Nova Scotia, New Brunswick and Territory residents and lowest among Alberta and British Columbia residents; however, these differences did not hold up in multivariate analysis. Higher reading time was also most

Table 2. Descriptive characteristics of the study sample, weighted to be representative of the Canadian population aged 20–75+

Characteristic	Total population (%)	Males (%)	Females (%)
Age (years)			
20–24	8.5	8.6	8.4
25–34	17.9	18.9	16.9
35–44	18.6	18.9	18.2
45–54	20.1	20.2	20.0
55–64	18.0	18.1	18.0
65–74	10.6	10.0	11.3
75+	6.3	5.4	7.3
Marital status			
Married	53.1	55.0	51.2
Common law	12.3	13.0	11.6
Widowed/separated/divorced	13.3	8.8	17.8
Single/never married	21.3	23.2	19.4
Education*			
<Secondary	12.2	12.2	12.3
Secondary graduate	15.7	15.4	16.0
Some post-secondary	5.0	5.0	4.9
Post-secondary graduate	67.1	67.4	66.8
Occupation (age 25–54 only) [†]			
Management/health/education/art/culture	39.9	35.6	45.0
Business/finance/administration	18.9	11.9	27.1
Sales/service	19.0	16.3	22.2
Trades/transport/equipment operation	15.4	26.7	2.1
Primary industry/processing/manufacturing	6.8	9.5	3.5
Annual income			
<\$40K	24.6	20.4	28.7
\$40–80K	33.8	34.2	33.4
$\geq$ \$80K	41.6	45.3	37.9
Province			
Newfoundland and Labrador	1.5	1.5	1.6
Prince Edward Island	0.4	0.4	0.4
Nova Scotia	2.9	2.8	3.0
New Brunswick	2.3	2.2	2.3
Quebec	23.8	23.7	23.9
Ontario	38.4	38.2	38.5
Manitoba	3.3	3.3	3.3
Saskatchewan	2.8	2.8	2.7
Alberta	10.8	11.2	10.4
British Columbia	13.6	13.6	13.5
Territories	0.3	0.3	0.3
Immigrant status			
Non-immigrant	75.9	75.6	76.2
Recent immigrant (0–9 years)	6.3	6.5	6.1
Established immigrant (≥ 10 years)	17.8	17.9	17.7
Race/ethnicity			
White	79.2	78.9	79.4
Visible minority	20.8	21.1	20.6
BMI			
Underweight	2.3	1.0	3.6
Normal weight	44.4	37.9	51.0
Overweight	34.5	41.5	27.5
Obese	18.8	19.6	18.0
Opinion of own weight			
Underweight	3.8	4.9	2.6
About right	54.0	56.2	51.8
Overweight	42.2	38.9	45.5
Smoking status			
Daily	16.8	18.9	14.7
Occasionally	4.9	5.5	4.4
Never	78.3	75.7	80.9
Fruits and vegetables consumption			
<5/day	60.0	67.4	52.6
5–10/day	36.5	29.8	43.2
>10 /day	3.5	2.8	4.2
Physical			
Active	26.5	28.5	24.4
Moderately	26.1	25.6	26.6
Inactive	47.5	45.9	49.0

Note: Values represent proportions (%) of Canadians with indicated characteristics.
 * Highest household education used for respondents aged 20–24; highest respondent education used for ages ≥ 25 .
[†] Occupational group included for respondents aged 25–54.

Figure 1. Prevalence (%) of high reported sedentary behaviours among Canadian adults, by gender and by age. *** $p < 0.001$ for difference between males and females.

Table 3. Proportions (%) of Canadian adults aged 20–75+ who report high sedentary behaviour time, according to demographic, health and health behaviour characteristics

Characteristic	Computer >5 hours/week	Video games ≥1 hour/week	TV/video >2 hours/day	Screen time >2 hours/day	Reading >5 hours/week	Total sedentary behaviour ≥5 hours/day
Gender and age – See Figure 1						
Marital status						
Married	40.9	13.3	30.5	59.1	41.0	24.2
Common law	42.5	24.4	31.0	60.6	30.8	23.9
Widowed/separated/divorced	32.9	7.8	41.6	62.7	49.1	33.6
Single/never married	60.1	31.5	27.0	68.5	35.6	35.3
Education*						
<Secondary	23.1	11.5	50.9	64.0	32.1	32.3
Secondary graduate	38.3	17.1	38.1	64.8	38.5	29.9
Some post-secondary	45.3	20.5	36.4	67.2	41.1	34.6
Post-secondary graduate	49.2	18.9	25.7	60.2	41.2	25.9
Occupation (age 25–54 [†])						
Management/health/education/ art/culture	50.1	20.7	16.9	53.8	33.2	17.9
Business/finance/administration	44.7	20.1	21.0	55.3	35.5	18.1
Sales/service	44.8	21.4	25.7	57.3	31.3	20.9
Trades/transport/equipment operation	38.0	27.3	27.0	57.5	20.4	17.6
Primary industry/processing/ manufacturing	39.2	21.1	27.4	55.6	22.0	17.9
Annual income						
<\$40K	39.2	14.6	42.3	66.6	41.8	36.5
\$40–80K	44.6	17.8	32.6	63.0	40.1	28.9
≥\$80K	46.6	19.6	23.6	57.9	38.0	21.6
Province						
Newfoundland and Labrador	39.6	16.1	33.3	62.1	35.5	26.7
Prince Edward Island	43.5	15.5	31.8	62.1	44.4	25.9
Nova Scotia	42.6	16.3	36.9	66.4	41.5	31.8
New Brunswick	41.3	17.5	36.1	63.2	38.3	29.2
Quebec	36.2	15.9	33.1	58.2	32.8	23.3
Ontario	46.1	18.0	30.8	62.8	42.9	29.7
Manitoba	41.4	20.6	31.5	60.1	40.6	26.6
Saskatchewan	43.2	19.5	31.4	61.4	38.2	26.4
Alberta	48.1	20.9	29.2	62.8	37.0	27.6
British Columbia	51.3	17.6	28.5	63.4	45.0	29.8
Territories	45.2	22.3	34.3	63.1	37.7	30.6
Immigrant status						
Non-immigrant	42.8	19.2	33.0	62.6	39.5	27.9
Recent immigrant (0–9 years)	64.3	15.9	17.0	60.7	36.9	28.8
Established immigrant (≥10 years)	42.4	12.3	29.1	58.6	41.4	26.7
Race/ethnicity						
White	41.9	17.6	33.0	61.8	41.0	27.7
Visible minority	52.5	18.4	24.9	61.6	34.6	28.0
BMI						
Underweight	48.4	17.7	25.7	61.4	40.0	30.2
Normal weight	44.3	17.4	26.8	58.3	39.9	25.5
Overweight	43.1	17.5	33.3	62.7	39.2	27.7
Obese	44.9	19.3	38.7	68.4	40.0	33.0
Opinion of own weight						
Underweight	45.7	29.1	33.4	67.1	36.5	36.0
About right	46.9	17.5	27.6	57.7	37.7	24.5
Overweight	42.6	17.2	35.7	66.5	42.5	31.2

Continued

Table 3. (Continued)

Characteristic	Computer >5 hours/week	Video games ≥1 hour/week	TV/video >2 hours/day	Screen time >2 hours/day	Reading >5 hours/week	Total sedentary behaviour ≥5 hours/day
Smoking status						
Daily	41.6	22.2	39.4	67.6	34.2	33.3
Occasionally	51.4	25.0	25.3	61.8	37.9	26.7
Never	44.2	16.4	29.9	60.5	41.0	26.7
Fruits and vegetables consumption						
<5/day	45.2	19.1	34.3	64.8	36.5	29.7
5–10/day	42.7	15.7	27.0	57.7	44.4	24.8
>10/day	40.1	15.8	24.6	52.9	45.0	25.2
Physical activity						
Active (≥3 KKD)	46.2	20.3	23.6	57.6	42.2	23.9
Moderately active (1.5–2.9 KKD)	44.9	17.5	29.3	61.0	42.2	26.6
Inactive (<1.5 KKD)	42.5	16.5	36.6	64.5	36.9	30.6

* Highest household education for respondents aged 20–24; highest respondent education for ages ≥25.

† Occupational group included for respondents aged 25–54.

‡ KKD = kilocalories per kilogram per day.

likely among older adults (e.g., ages 75+ had 6 times greater odds of reporting >5 hours/week vs. ages 20–24), and for females, single/never married, higher educated, recent immigrants, and Prince Edward Island, Ontario, British Columbia and Territory residents, and least likely for blue-collar occupation and Quebec residents.

Health and health behaviour correlates of SB

BMI was most strongly associated with TV time. Compared to normal weight individuals, the odds of reporting >2 hours/day TV viewing were significantly lower in underweight individuals (OR: 0.86, 95% CI: 0.77–0.96) and significantly higher in individuals with overweight (OR: 1.15, 95% CI: 1.10–1.19) and obesity (OR: 1.30, 95% CI: 1.23–1.36). The odds of accumulating >1 hour/week of video game time were also higher among those with overweight (OR: 1.10, 95% CI: 1.04–1.15) and obesity (OR: 1.25, 95% CI: 1.18–1.35), while the odds of accumulating >5 hours/week of reading were slightly lower among those with overweight (OR: 0.94, 95% CI: 0.90–0.97), but not obesity (OR: 0.97, 95% CI: 0.92–1.02). Examining weight perceptions, individuals perceiving themselves as overweight were more likely to report higher levels of all behaviours, while those who perceived themselves as underweight were more likely to report higher levels of video game playing and TV viewing compared to those perceiving their weight as about right.

Compared to never-smokers, daily smokers were more likely to report higher SBs, with the exception of lower computer use in multivariate analysis. Adults consuming <5 servings/day of fruits and vegetables were most likely to report higher computer use, video game playing and TV viewing, while those consuming >10 servings/day were most likely to report higher reading time. More active adults were more likely to report higher reading time, while inactive adults were most likely to report higher TV time. Total SB time was highest among inactive adults.

DISCUSSION

We comprehensively examined self-reported SB in a large representative population sample of Canadian adults, including a broad list of socio-demographic, health and health behaviour correlates. About 44% of Canadians report >5 hours/week

computer use, over 30% report >2 hours/day TV viewing, and almost 30% report ≥5 hours/day of total SB time. However, 40% of Canadians report >5 hours/week of reading time, a SB modality inversely associated with overweight in the current study. These findings highlight the importance of measuring a range of SB modalities, in addition to total SB time.¹⁵

Our findings suggest that computer use has increased substantially relative to the 2007 CCHS survey, when only 29% of Canadian adults reported >5 hours/week computer use, compared to 44% five years later.⁸ In contrast, TV time has remained relatively stable.⁸ Comparison to a second study using the 2007 CCHS data,⁹ though based on a different age range, suggests that increases in computer time are similar for men and women, a steady 6%–7% gap persisting of more men than women reporting high computer use. Only the latter study reported on reading time, whereby 29% of men and 38% of women reported >5 hours/week reading; however, comparison to the current results (33% M, 46% F) is difficult, as the earlier study was restricted to ages 20–64, while our study includes older adults with twice the prevalence of high reading time compared to younger adults.

Our results for total SB time appear lower than those using objective accelerometer data which suggest that Canadian adults average >9 hours/day (70% of waking hours) sedentary.¹⁶ In addition to inherent biases of social desirability and recall, the CCHS does not focus on sitting per se, but on common behaviours done while sitting. Self-reported behaviours provide context regarding modality (TV, computer, reading, etc.) that accelerometer-based SB time measures cannot provide.¹⁵ This is important, given our findings that the association with both socio-demographic correlates and health outcomes varies according to modality.

SB and socio-demographic characteristics

In the earlier, less comprehensive analysis using the 2007 CCHS data,⁸ the likelihood of being a frequent TV viewer increased with age, never married, lower education, lower income, and unemployed status. The likelihood of frequent computer use was associated with male gender, younger age, never married, and higher education, but not with household income, immigrant

Table 4. Multivariable logistic regression: Odds of reporting high sedentary behaviour time among Canadian adults aged 20–75+

	Computer >5 hours/week	Video games ≥1 hour/week	TV/video >2 hours/day	Screen time >2 hours/day	Reading >5 hours/week	Total sedentary behaviour ≥5 hours/day
Gender						
Male	1.00	1.00	1.00	1.00	1.00	1.00
Female	0.78 (0.75, 0.80)	0.41 (0.40, 0.43)	0.98 (0.95, 1.01)	0.78 (0.76, 0.81)	1.64 (1.59, 1.69)	0.96 (0.93, 0.99)
Age (years)						
20–24	1.00	1.00	1.00	1.00	1.00	1.00
25–34	0.69 (0.65, 0.73)	0.64 (0.61, 0.68)	1.14 (1.06, 1.22)	0.74 (0.70, 0.80)	0.97 (0.91, 1.03)	0.67 (0.63, 0.71)
35–44	0.48 (0.45, 0.51)	0.36 (0.34, 0.39)	1.18 (1.09, 1.27)	0.55 (0.52, 0.59)	1.12 (1.05, 1.19)	0.51 (0.48, 0.55)
45–54	0.37 (0.34, 0.39)	0.16 (0.14, 0.17)	1.68 (1.56, 1.81)	0.59 (0.56, 0.63)	1.47 (1.38, 1.57)	0.57 (0.53, 0.61)
55–64	0.38 (0.35, 0.40)	0.10 (0.09, 0.10)	2.66 (2.47, 2.87)	0.84 (0.78, 0.90)	2.61 (2.44, 2.79)	0.91 (0.85, 0.97)
65–74	0.38 (0.35, 0.41)	0.08 (0.07, 0.09)	4.12 (3.80, 4.48)	1.14 (1.06, 1.23)	4.28 (3.97, 4.62)	1.49 (1.38, 1.61)
75+	0.21 (0.19, 0.23)	0.06 (0.05, 0.07)	5.01 (4.58, 5.49)	1.12 (1.03, 1.23)	5.94 (5.44, 6.48)	1.73 (1.59, 1.88)
Marital status						
Married	1.00	1.00	1.00	1.00	1.00	1.00
Common law	1.03 (0.98, 1.08)	1.20 (1.14, 1.28)	1.33 (1.26, 1.39)	1.16 (1.11, 1.21)	0.98 (0.93, 1.03)	1.23 (1.17, 1.30)
Widowed/separated/divorced	1.02 (0.98, 1.07)	0.86 (0.79, 0.93)	0.99 (0.94, 1.03)	1.01 (0.97, 1.06)	1.10 (1.05, 1.15)	1.17 (1.12, 1.23)
Single/never married	1.52 (1.46, 1.59)	1.18 (1.11, 1.24)	1.25 (1.19, 1.31)	1.40 (1.34, 1.46)	1.26 (1.20, 1.31)	1.72 (1.64, 1.80)
Education*						
<Secondary	0.43 (0.41, 0.46)	0.94 (0.88, 1.01)	1.48 (1.42, 1.63)	0.90 (0.86, 0.95)	0.43 (0.41, 0.46)	0.89 (0.85, 0.93)
Secondary graduate	0.69 (0.66, 0.71)	0.99 (0.93, 1.04)	1.35 (1.35, 1.47)	1.09 (1.05, 1.14)	0.79 (0.76, 0.82)	1.05 (1.00, 1.09)
Some post-secondary	0.83 (0.78, 0.89)	0.96 (0.89, 1.05)	1.26 (1.26, 1.43)	1.14 (1.06, 1.21)	1.00 (0.94, 1.06)	1.21 (1.14, 1.30)
Post-secondary graduate	1.00	1.00	1.00	1.00	1.00	1.00
Occupation (age 25–54†)						
Management/health/education/art/culture	1.00	1.00	1.00	1.00	1.00	1.00
Business/finance/administration	0.87 (0.81, 0.92)	1.13 (1.04, 1.22)	1.19 (1.10, 1.28)	1.07 (1.01, 1.14)	1.08 (1.01, 1.15)	0.96 (0.88, 1.04)
Sales/service	0.80 (0.75, 0.85)	1.02 (0.94, 1.11)	1.47 (1.36, 1.59)	1.07 (1.00, 1.14)	0.97 (0.90, 1.03)	1.01 (0.93, 1.09)
Trades/transport/equipment operation	0.52 (0.48, 0.56)	0.87 (0.80, 0.95)	1.36 (1.25, 1.48)	0.83 (0.77, 0.89)	0.67 (0.62, 0.73)	0.71 (0.65, 0.78)
Primary industry/processing/manufacturing	0.62 (0.56, 0.68)	0.77 (0.69, 0.87)	1.43 (1.28, 1.59)	0.88 (0.80, 0.96)	0.71 (0.64, 0.80)	0.80 (0.71, 0.90)
Annual income						
<\$40K	0.92 (0.89, 0.96)	0.99 (0.94, 1.05)	1.57 (1.50, 1.64)	1.23 (1.19, 1.29)	0.99 (0.95, 1.03)	1.50 (1.44, 1.57)
\$40–80K	1.02 (0.99, 1.05)	1.04 (0.99, 1.08)	1.27 (1.22, 1.32)	1.13 (1.09, 1.16)	1.02 (0.98, 1.05)	1.26 (1.22, 1.31)
≥\$80K	1.00	1.00	1.00	1.00	1.00	1.00
Province						
Newfoundland and Labrador	1.24 (1.11, 1.39)	1.03 (0.88, 1.20)	0.86 (0.76, 0.97)	1.08 (0.97, 1.21)	1.19 (1.06, 1.33)	1.17 (1.03, 1.33)
Prince Edward Island	1.43 (1.16, 1.76)	0.97 (0.73, 1.31)	0.85 (0.68, 1.06)	1.11 (0.90, 1.37)	1.65 (1.34, 2.03)	1.10 (0.87, 1.39)
Nova Scotia	1.35 (1.24, 1.47)	1.03 (0.91, 1.16)	1.10 (1.01, 1.20)	1.33 (1.22, 1.45)	1.44 (1.32, 1.57)	1.49 (1.36, 1.63)
New Brunswick	1.35 (1.23, 1.49)	1.12 (0.99, 1.28)	1.00 (0.91, 1.11)	1.15 (1.05, 1.27)	1.32 (1.20, 1.45)	1.31 (1.18, 1.45)
Quebec	1.00	1.00	1.00	1.00	1.00	1.00
Ontario	1.42 (1.37, 1.48)	1.18 (1.13, 1.25)	1.06 (1.02, 1.10)	1.27 (1.23, 1.32)	1.65 (1.59, 1.72)	1.52 (1.46, 1.59)
Manitoba	1.19 (1.09, 1.29)	1.33 (1.20, 1.48)	0.97 (0.89, 1.06)	1.05 (0.97, 1.13)	1.49 (1.37, 1.61)	1.22 (1.12, 1.34)
Saskatchewan	1.32 (1.21, 1.44)	1.22 (1.09, 1.37)	0.93 (0.84, 1.02)	1.09 (1.00, 1.19)	1.34 (1.23, 1.46)	1.20 (1.09, 1.33)
Alberta	1.48 (1.41, 1.56)	1.26 (1.19, 1.36)	1.04 (0.99, 1.10)	1.28 (1.22, 1.35)	1.34 (1.27, 1.42)	1.45 (1.37, 1.54)
British Columbia	1.78 (1.70, 1.87)	1.21 (1.13, 1.29)	0.96 (0.90, 1.01)	1.32 (1.26, 1.39)	1.72 (1.63, 1.80)	1.53 (1.45, 1.61)
Territories	1.31 (1.01, 1.70)	1.24 (0.89, 1.70)	1.19 (0.90, 1.57)	1.18 (0.91, 1.54)	1.64 (1.25, 2.15)	1.57 (1.18, 2.07)
Immigrant status						
Non-immigrant	1.00	1.00	1.00	1.00	1.00	1.00
Recent immigrant (0–9 years)	1.72 (1.61, 1.83)	0.51 (0.46, 0.55)	0.63 (0.58, 0.68)	0.94 (0.88, 1.01)	1.42 (1.33, 1.51)	1.18 (1.10, 1.27)
Established immigrant (≥10 years)	1.03 (0.99, 1.07)	0.83 (0.78, 0.88)	0.74 (0.70, 0.77)	0.80 (0.77, 0.84)	0.95 (0.91, 0.99)	0.87 (0.83, 0.91)
Race/ethnicity						
White	1.00	1.00	1.00	1.00	1.00	1.00
Visible minority	1.11 (1.06, 1.16)	0.93 (0.88, 0.99)	1.01 (0.97, 1.06)	1.10 (1.06, 1.15)	0.83 (0.80, 0.87)	1.07 (1.02, 1.12)
BMI						
Underweight	1.08 (0.98, 1.19)	0.89 (0.79, 1.02)	0.86 (0.77, 0.96)	1.02 (0.93, 1.12)	1.03 (0.93, 1.13)	0.99 (0.89, 1.09)
Normal weight	1.00	1.00	1.00	1.00	1.00	1.00
Overweight	0.95 (0.92, 0.99)	1.10 (1.04, 1.15)	1.15 (1.10, 1.19)	1.04 (1.00, 1.07)	0.94 (0.90, 0.97)	1.05 (1.00, 1.09)
Obese	1.02 (0.97, 1.07)	1.25 (1.18, 1.35)	1.30 (1.23, 1.36)	1.21 (1.15, 1.27)	0.97 (0.92, 1.02)	1.24 (1.18, 1.30)
Opinion of own weight						
Underweight	1.00 (0.93, 1.08)	1.56 (1.42, 1.70)	1.19 (1.15, 1.24)	1.20 (1.11, 1.29)	1.08 (1.00, 1.17)	1.37 (1.27, 1.48)
About right	1.00	1.00	1.00	1.00	1.00	1.00
Overweight	1.34 (1.29, 1.39)	1.23 (1.17, 1.29)	1.22 (1.12, 1.32)	1.40 (1.35, 1.45)	1.18 (1.14, 1.23)	1.35 (1.30, 1.41)

Continued

Table 4. (Continued)

	Computer > 5 hours/week	Video games ≥ 1 hour/week	TV/video > 2 hours/day	Screen time > 2 hours/day	Reading > 5 hours/week	Total sedentary behaviour ≥ 5 hours/day
Smoking status						
Daily	0.94 (0.90, 0.98)	1.17 (1.10, 1.22)	1.39 (1.34, 1.45)	1.29 (1.24, 1.35)	1.04 (1.00, 1.09)	1.38 (1.32, 1.44)
Occasionally	1.02 (0.95, 1.08)	0.99 (0.92, 1.07)	1.03 (0.96, 1.11)	1.03 (0.96, 1.10)	1.20 (1.12, 1.28)	1.02 (0.95, 1.10)
Never	1.00	1.00	1.00	1.00	1.00	1.00
Fruits and vegetables consumption						
<5/day	1.25 (1.16, 1.35)	1.29 (1.16, 1.44)	1.27 (1.17, 1.39)	1.38 (1.28, 1.48)	0.73 (0.67, 0.78)	1.04 (0.95, 1.13)
5–10/day	1.17 (1.08, 1.26)	1.20 (1.08, 1.34)	1.00 (0.92, 1.09)	1.16 (1.08, 1.25)	0.91 (0.84, 0.98)	0.91 (0.83, 0.99)
>10/day	1.00	1.00	1.00	1.00	1.00	1.00
Physical activity						
Active	1.00	1.00	1.00	1.00	1.00	1.00
Moderately active	1.05 (1.01, 1.09)	1.00 (0.95, 1.05)	1.21 (1.16, 1.27)	1.14 (1.10, 1.19)	0.96 (0.93, 1.00)	1.14 (1.09, 1.19)
Inactive	1.02 (0.98, 1.05)	0.98 (0.94, 1.03)	1.48 (1.42, 1.54)	1.25 (1.20, 1.29)	0.77 (0.74, 0.80)	1.27 (1.22, 1.32)

Note: All listed variables included in multivariable regression model. BMI = body mass index. Bold font indicates statistically significant association with reporting high levels of each SB.

* Highest household education for respondents aged 20–24; highest respondent education for ages ≥25.

† Occupational group included for respondents aged 25–54.

status or employment status. Our update uses more recent data, explores additional SBs in addition to TV and computer time, and identifies additional correlates not previously identified in the Canadian context.

SBs in this analysis were independently associated with numerous socio-demographic characteristics, most strongly age, but also gender, marital status, education, income, occupation category, immigrant status, race/ethnicity and province of residence. Correlates of high TV time identified in previous literature include male gender,¹⁷ employment status,^{18–20} lower education,^{18–21} and living in regional areas or outside of capital cities^{18,20} or in low walkability neighbourhoods.¹⁹ Male gender,^{17,22} and age and single marital status²² have previously been strongly associated with computer time, similar to current results. To our knowledge, ours is the first study to investigate socio-demographic correlates of reading time in adults, showing that age, gender, education, occupation type, income, immigrant status and race/ethnicity are not necessarily associated in the same manner or direction as with computer or TV time.

SB and health and health behaviour outcomes

In the current study, weight status was positively associated with both TV viewing and video game playing time. Previously, the 2007 CCHS data showed that obesity prevalence was substantially lower in those who watched TV ≤5 hours/week compared to those who watched ≥21 hours/week.⁹ Elsewhere, TV viewing has frequently been strongly associated with body fatness, weight status and odds of developing obesity over time, independent of PA.^{5,6,17,20,23–26} An association between video game playing time and BMI had also been reported.²⁷ In limited prior research evaluating computer time, some studies corroborate current results showing no relationship with weight status,^{5,6,9} while others report a positive association.^{17,28} Evidence for reading time is even more limited, but similar to our findings has consistently shown that higher reading time is not associated with increased risk of overweight or obesity.^{5,6,9}

In our study, *smokers* were more likely to report higher TV viewing, video game playing and reading time. Prior research corroborates these results for TV viewing,^{17,24} while likewise also showing no association with computer time.¹⁷ Overall sitting time has also previously been associated with smoking,²¹ though we found no association for total SB time in our study.

Our results show all screen-based behaviours to be inversely associated with *fruit and vegetable consumption*, while higher reading time was positively associated with fruit and vegetable consumption (perhaps explaining no association with total SB). Past literature has focused primarily on TV time or total ST, demonstrating clear evidence for an association between TV time and unhealthful dietary patterns, including lower fruit and vegetable consumption.^{9,24,29,30} A recent study using objectively measured total SB found no association with fruit and vegetable intake or overall diet quality,³¹ suggesting the importance of specific SB modality when examining links to health-related dietary elements.

Finally, current results indicate TV time is most strongly inversely associated with *physical activity* level, while PA was positively associated with higher reading time. Past research has also shown that passive TV and sitting time were associated with lower

moderate-to-vigorous physical activity (MVPA),^{5,9,19,20} while mentally active computer use and reading were associated with lower odds of low MVPA.⁵ A recent systematic review concluded that all SB modalities were moderately to weakly inversely associated with lower PA levels, with some evidence that SB displaces light intensity PA; however, TV viewing and total SB time were most commonly studied, with total sitting time, ST and occupational SB represented to a lesser degree (and reading time – in our study positively associated with PA – not mentioned).³²

Overall, these results highlight the fact that SB modalities differ both in their demographic correlates, as well as their associations with health behaviours and health outcomes. Reading was generally associated with positive health behaviours and outcomes, while the opposite was true for screen-based SBs. In the future, both practitioners and public health interventions should clearly distinguish between beneficial and deleterious SBs.

Strengths and limitations

Using a very large nationally representative population sample, this analysis gives the first comprehensive profile of SB among Canadian adults, including a broad range of socio-demographic, health and health behaviour correlates. The cross-sectional data limit causal inference between SB measures and the correlates examined, and reverse or bi-directional relationships may exist. Further, the reliance on self-reported data may lead to underestimates of SB and body weight, and overestimates of PA, height and fruit/vegetable consumption due to social desirability and recall biases. Future research should explore trends over time in the evolving nature of sedentary behaviours.

CONCLUSION

Over 30% of Canadian adults report >2 hours/day TV viewing, 44% report >5 hours/week computer use, and 40% report >5 hours/week reading time; less than 20% report ≥1 hour/week video game playing. Computer use has increased substantially compared to previously published results using same-survey data just 5 years older, while TV time and reading time have remained more stable. In general, socio-demographic, health and health behaviour correlates differ across SB modalities, though the strongest correlate across all SBs was age; others include gender, marital status, education, occupation type, income and immigrant status, as well as BMI, weight perceptions, smoking, diet and PA. Public health interventions targeting SB should be tailored both to the specific modality targeted and to the needs of the specific population segment of interest.

REFERENCES

1. Sedentary Behaviour Research Network. Standardized use of the terms “sedentary” and “sedentary behaviours”. *Appl Physiol Nutr Metab* 2012; 37:540–42. doi: 10.1139/h2012-024.
2. Tremblay MS, Colley RC, Saunders TJ, Healy GN, Owen N. Physiological and health implications of a sedentary lifestyle. *Appl Physiol Nutr Metab* 2010; 35(6):725–40. PMID: 21164543. doi: 10.1139/H10-079.
3. Wilmot EG, Edwardson CL, Achana FA, Davies MJ, Gorely T, Gray LJ, et al. Sedentary time in adults and the association with diabetes, cardiovascular disease and death: Systematic review and meta-analysis. *Diabetologia* 2012; 55(11):2895–905. PMID: 22890825. doi: 10.1007/s00125-012-2677-z.
4. Biswas A, Oh PI, Faulkner GE, Bajaj RR, Silver MA, Mitchell MS, et al. Sedentary time and its association with risk for disease incidence, mortality, and hospitalization in adults: A systematic review and meta-analysis. *Ann Intern Med* 2015;162(2):123–32. doi: 10.7326/M14-1651.
5. Kikuchi H, Inoue S, Sugiyama T, Owen N, Oka K, Nakaya T, et al. Distinct associations of different sedentary behaviors with health-related attributes among older adults. *Prev Med* 2014;67:335–39. PMID: 25117527. doi: 10.1016/j.ypmed.2014.08.011.
6. Nang EE, Salim A, Wu Y, Tai ES, Lee J, Van Dam RM. Television screen time, but not computer use and reading time, is associated with cardio-metabolic biomarkers in a multiethnic Asian population: A cross-sectional study. *Int J Behav Nutr Phys Act* 2013;10:70. PMID: 23718927. doi: 10.1186/1479-5868-10-70.
7. Gopinath B, Baur LA, Hardy LL, Kifley A, Rose KA, Wong TY, et al. Relationship between a range of sedentary behaviours and blood pressure during early adolescence. *J Hum Hypertens* 2012;26(6):350–56. PMID: 21614023. doi: 10.1038/jhh.2011.40.
8. Shields M, Tremblay MS. Screen time among Canadian adults: A profile. *Health Rep* 2008;19(2):31–43. PMID: 18642517.
9. Shields M, Tremblay MS. Sedentary behaviour and obesity. *Health Rep* 2008; 19(2):19–30. PMID: 18642516.
10. Rhodes RE, Mark RS, Temmel CP. Adult sedentary behavior: A systematic review. *Am J Prev Med* 2012;42(3):e3–28. PMID: 22341176. doi: 10.1016/j.amepre.2011.10.020.
11. Statistics Canada. *Canadian Community Health Survey (CCHS): User Guide 2012 and 2011–2012 Microdata Files*. Ottawa, ON: Statistics Canada, 2013.
12. World Health Organization. *Obesity. Preventing and Managing the Global Epidemic. Report of a WHO Consultation on Obesity*. Geneva, Switzerland: World Health Organization, 2000.
13. Taylor H, Jacobs DR, Schucker B, Knudsen J, Leon AS, DeBacker G. A questionnaire for the assessment of leisure time physical activities. *J Chron Dis* 1978;31:741–55. PMID: 748370. doi: 10.1016/0021-9681(78)90058-9.
14. Institute of Medicine. Physical activity. In: *Dietary Reference Intakes: Energy, Carbohydrate, Fiber, Fat, Fatty Acids, Cholesterol, Protein, and Amino Acids*. Washington, DC: National Academy Press, 2002; 880–935.
15. Saunders TJ, Chaput JP, Tremblay MS. Sedentary behaviour as an emerging risk factor for cardiometabolic diseases in children and youth. *Can J Diabetes* 2014;38(1):53–61. PMID: 24485214. doi: 10.1016/j.cjcd.2013.08.266.
16. Colley R, Garriguet D, Janssen I, Craig CL, Clarke J, Tremblay MS. Physical activity of Canadian adults: Accelerometer results from the 2007 to 2009 Canadian Health Measures Survey. *Health Rep* 2011;22(1):15–23. PMID: 21510586.
17. Uijtdewilligen L, Singh AS, Chinapaw MJ, Twisk JW, van Mechelen W. Person-related determinants of TV viewing and computer time in a cohort of young Dutch adults: Who sits the most? *Scand J Med Sci Sports* 2015; 25(5):716–23. PMID: 25186285. doi: 10.1111/sms.12295.
18. Clark BK, Sugiyama T, Healy GN, Salmon J, Dunstan DW, Shaw JE, et al. Socio-demographic correlates of prolonged television viewing time in Australian men and women: The AusDiab study. *J Phys Act Health* 2010; 7(5):595–601.
19. Ding D, Sugiyama T, Winkler E, Cerin E, Wijndaele K, Owen N. Correlates of change in adults' television viewing time: A four-year follow-up study. *Med Sci Sports Exerc* 2012;44(7):1287–92. PMID: 22297804. doi: 10.1249/MSS.0b013e31824ba87e.
20. Kikuchi H, Inoue S, Sugiyama T, Owen N, Oka K, Shimomitsu T. Correlates of prolonged television viewing time in older Japanese men and women. *BMC Public Health* 2013;13:213. PMID: 23496962. doi: 10.1186/1471-2458-13-213.
21. Uijtdewilligen L, Twisk JW, Singh AS, Chinapaw MJ, van Mechelen W, Brown WJ. Biological, socio-demographic, work and lifestyle determinants of sitting in young adult women: A prospective cohort study. *Int J Behav Nutr Phys Act* 2014;11:7. PMID: 24457004. doi: 10.1186/1479-5868-11-7.
22. Wenzel HG, Bakken IJ, Johansson A, Gotestam KG, Oren A. Excessive computer game playing among Norwegian adults: Self-reported consequences of playing and association with mental health problems. *Psychol Rep* 2009; 105(3 Pt 2):1237–47. PMID: 20229923. doi: 10.2466/PRO.105.F.1237-1247.
23. Salmon J, Bauman A, Crawford D, Timperio A, Owen N. The association between television viewing and overweight among Australian adults participating in varying levels of leisure-time physical activity. *Int J Obes Relat Metab Disord* 2000;24(5):600–6. PMID: 10849582. doi: 10.1038/sj.ijo.0801203.
24. Hu FB, Li TY, Colditz GA, Willett WC, Manson JE. Television watching and other sedentary behaviors in relation to risk of obesity and type 2 diabetes mellitus in women. *JAMA* 2003;289(14):1785–91. PMID: 12684356. doi: 10.1001/jama.289.14.1785.
25. Inoue S, Sugiyama T, Takamiya T, Oka K, Owen N, Shimomitsu T. Television viewing time is associated with overweight/obesity among older adults, independent of meeting physical activity and health guidelines. *J Epidemiol* 2012;22(1):50–56. PMID: 22156288.
26. Mitchell JA, Bottai M, Park Y, Marshall SJ, Moore SC, Matthews CE. A prospective study of sedentary behavior and changes in the body mass index distribution. *Med Sci Sports Exerc* 2014;46(12):2244–52. PMID: 24781893. doi: 10.1249/MSS.0000000000000366.
27. Ballard M, Gray M, Reilly J, Noggle M. Correlates of video game screen time among males: Body mass, physical activity, and other media use. *Eating Behav* 2009;10(3):161–67. doi: 10.1016/j.eatbeh.2009.05.001.

28. Shuval K, Leonard T, Murdoch J, Caughy MO, Kohl HW 3rd, Skinner CS. Sedentary behaviors and obesity in a low-income, ethnic-minority population. *J Phys Act Health* 2013;10(1):132–36. PMID: 22398752.
29. Charreire H, Kesse-Guyot E, Bertrais S, Simon C, Chaix B, Weber C, et al. Associations between dietary patterns, physical activity (leisure-time and occupational) and television viewing in middle-aged French adults. *Br J Nutr* 2011;105(6):902–10. PMID: 21251337. doi: 10.1017/S000711451000440X.
30. Hobbs M, Pearson N, Foster PJ, Biddle SJ. Sedentary behaviour and diet across the lifespan: An updated systematic review. *Br J Sports Med* 2015;49(18):1179–88. PMID: 25351783. doi: 10.1136/bjsports-2014-093754.
31. Shuval K, Nguyen BT, Yaroch AL, Drope J, Gabriel KP. Accelerometer determined sedentary behavior and dietary quality among US adults. *Prev Med* 2015;78:38–43. PMID: 26141247. doi: 10.1016/j.ypmed.2015.06.010.
32. Mansoubi M, Pearson N, Biddle SJ, Clemes S. The relationship between sedentary behaviour and physical activity in adults: A systematic review. *Prev Med* 2014;69:28–35. PMID: 25193005. doi: 10.1016/j.ypmed.2014.08.028.

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RÉSUMÉ

OBJECTIFS : Les écarts transcanadiens dans l'activité physique et le statut pondéral ont été illustrés, mais on en sait moins au sujet des comportements sédentaires (CS). Nous avons cherché à décrire divers CS et leurs corrélats chez les Canadiens adultes.

MÉTHODE : Les données transversales de l'Enquête sur la santé dans les collectivités canadiennes de 2011–2012 ont inclus 92 918 répondants de 20 ans à 75 ans et plus, qui représentaient >22 millions de Canadiens adultes. L'écoute de la télévision/de vidéos, l'usage de l'ordinateur ou de

jeux vidéo et le temps de lecture ont été autodéclarés. Nous avons examiné les associations avec les variables sociodémographiques, l'état de santé et les habitudes de santé.

RÉSULTATS : Environ 31 % des adultes ont déclaré >2 heures/jour d'écoute de la télévision, tandis que 47 % des hommes et 41 % des femmes ont déclaré >5 heures/semaine d'usage de l'ordinateur, 24 % des hommes et 12 % des femmes ont déclaré jouer à des jeux vidéo ≥1 heure/semaine, et 33 % des hommes et 46 % des femmes ont déclaré lire >5 heures/semaine; 28 % des répondants ont déclaré avoir ≥5 heures/jour de CS au total. L'âge était le corrélat le plus fort : les adultes de 75 ans et plus avaient une probabilité 5 et 6 fois plus grande, respectivement, de déclarer >2 heures/jour d'écoute de la télévision et >5 heures/semaine de lecture, mais des probabilités beaucoup moindre de déclarer passer beaucoup de temps à l'ordinateur ou à jouer à des jeux vidéo que les adultes de 20 à 24 ans. Les autres variables associées à certains types de CS étaient le sexe, l'état matrimonial, le niveau de scolarité, la profession, le revenu et le statut d'immigrant, ainsi que l'IMC, les perceptions du poids, le tabagisme, le régime alimentaire et l'activité physique.

CONCLUSION : Les comportements sédentaires courants étaient associés à de nombreuses caractéristiques sociodémographiques, d'état de santé et d'habitudes de santé au sein d'un vaste échantillon représentatif de Canadiens. Ces corrélats différaient selon le type de CS. Les interventions de santé publique ciblant les CS devraient être adaptées au comportement et au segment démographique d'intérêt.

MOTS CLÉS : temps d'écran; lecture; télévision; ordinateur; activité physique; obésité