Correlates of physical activity among First Nations children residing in First Nations communities in Canada

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ABSTRACT

OBJECTIVES: Physical activity has numerous mental, emotional, spiritual and physical benefits. The factors influencing physical activity among First Nations children have not been well studied. The objective was to examine the associations between several intrapersonal, family and community factors and physical activity among First Nations school-aged children residing in First Nations communities.

METHODS: Participants consisted of 3,184 children (6-11 years old) from the 2008/10 First Nations Regional Health Survey, a representative sample of First Nations persons who reside in on-reserve and northern First Nations communities. The survey addresses a holistic range of health issues. Primary caregivers completed interviews to assess each child's moderate-to-vigorous physical activity (MVPA), participation in traditional physical activities, six intrapersonal factors, four family factors and two community factors.

RESULTS: Based on primary caregiver reports, 72% of children accumulated a daily average of ≥60 minutes of MVPA and 54% participated in at least one traditional First Nations physical activity in the past year. Older age, having more people in the household, and having more relatives help the child understand their culture were independently associated with accumulating ≥60 minutes of MVPA. School attendance, use of First Nations language, having parents with a high school education, smaller community size, and having more community members help the child understand their culture were independently associated with participation in traditional First Nations physical activities.

CONCLUSION: Among First Nations children, there are several correlates of physical activity from diverse ecological levels.

KEY WORDS: Child; motor activity; Indigenous population; health surveys; Canada

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

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Recent estimates, which are based on objective measures of physical activity from the 2007-2009 Canadian Health Measures Survey, indicate that only one in ten school-aged children in Canada meet the current public health guideline of 60 minutes per day of moderate-to-vigorous physical activity (MVPA).¹ While little is known about the physical activity levels of Aboriginal children,² including the First Nations population, the data that are available suggest that inactivity in these groups is a concern. For instance, a recent study of self-reported MVPA from 204 on-reserve 10-16 year olds found that only 14% of boys and 4% of girls met public health guidelines for MVPA.³

Numerous mental, emotional, spiritual and physical problems in First Nations peoples may be related to an inactive lifestyle.⁴⁻⁶ A lack of physical activity in First Nations children is of particular concern as they are disproportionately disadvantaged economically and socially through poverty, inadequate housing and low educational achievement.⁷ Children deprived of opportunities for participation in physical activity are not only at higher risk for negative physical and psychosocial outcomes, but are also being denied the prospect to become fully enabled for life⁸ and to live in balance.⁵

In order to develop evidence-based interventions to foster positive physical activity habits in First Nations children, it is necessary to understand the factors that influence physical activity behaviour. Behaviour theories and models provide a systematic framework for examining the factors that influence a

behaviour such as MVPA.¹⁰ Ecological models are commonly used in the physical activity literature.^{10,11} These ecological models postulate that physical activity is influenced by factors at multiple levels, including intrapersonal (e.g., age, gender, cultural beliefs), interpersonal (e.g., relationships and characteristics of family) and community levels (e.g., social and economic conditions, facilities and programs).¹² There is a lack of research on the determinants of physical activity among First Nations children who reside in First Nations communities.

The purpose of the current study was to examine independent associations between intrapersonal factors, family factors and community factors with physical activity among First Nations school-aged children residing in First Nations communities. These associations were assessed in the 2008/10 First Nations Regional Health Survey (RHS), a nationally representative sample of First Nations persons who reside in on-reserve and northern First Nations communities across Canada.

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Survey and participants

A detailed description of the RHS can be found elsewhere. ¹³ Briefly, the RHS addresses a holistic range of priority health issues for First Nations. It was overseen by the First Nations Information Governance Centre (FNIGC). The questionnaires were completed between 2008 and 2010 via in-person interviews using a Computer Assisted Personal Interview (CAPI) system administered by local field workers. A primary caregiver completed the questionnaire (~22 minutes) for child participants.

A total of 3,184 children aged 6-11 years were included in the RHS. The total population represented in the final MVPA analysis was 43,605 persons, which accounted for 89% of 6-11 year old First Nations children living in on-reserve and northern First Nations communities. The corresponding numbers for the traditional activities analysis were 45,116 and 92% respectively. The RHS was designed to represent the First Nations population living in First Nations communities (e.g., on-reserve and in northern Canada above the 60th parallel) in all provinces and territories, except Nunavut. Overall, 216 communities were included and 5.3% of the target population was surveyed. The response rate was 72.5%.

The RHS sample design incorporated a two-stage sampling strategy. The first stage involved the selection of communities to participate in the survey. Initially, all First Nations communities in Canada were stratified by region, subregion and community size [large (1,500+ people), medium (300-1,499 people) and small (<300 people)]. Large communities were automatically included, while medium and small communities were randomly selected with equal probability within their respective strata. When a randomly selected community chose not to participate, it was replaced randomly with another community in the same subregion and size grouping.

The second stage of sampling pertained to the selection of individuals within participating communities. All community members were identified using band membership lists. Community members were randomly selected within age/gender groups from these lists. When a selected community member chose not to participate, a substitution was made from the ordered randomly generated list. The sampling rate within each community was determined as a function of the overall subregion probability (within regions) and the probability of selection of the community (within subregion). Individual responses were weighted, using Indian and North American Affairs Canada registry counts, to reflect the representation of the population by the sample.

Intrapersonal factors

Demographics: Gender and age categories were considered. The mid-point of the age range defined the two age categories (6-8 and 9-11 years). Age was categorized to be consistent with the categorical nature of the remaining correlates.

First Nations Language: Use of First Nations language was grouped as follows: 'does not understand/speak a First Nations language', 'understands/speaks a First Nations language but does not use most often in daily life' and 'use of a First Nations language most often in daily life'.

First Nations Culture: Importance of First Nations culture was assessed by asking "How important are traditional cultural events in your child's life?" Response options were 'very important', 'somewhat important', 'not very important' and 'not important'.

School Attendance: This was grouped as 'yes' or 'no' based on school attendance at the time of survey completion.

Chronic Conditions: Respondents were asked whether their child had the following chronic health conditions: arthritis, chronic back pain, rheumatism, osteoporosis, asthma, chronic bronchitis, emphysema, serious vision problems not correctable with glasses (e.g., cataracts, glaucoma, blindness), hearing impairment, epilepsy, psychological or nervous disorders, cognitive or mental disability, Attention Deficit Disorder/Attention Deficit-Hyperactivity Disorder, learning disability, heart disease, high blood pressure, stroke, thyroid problems, cancer, liver disease, stomach or intestinal problems, HIV/AIDS, hepatitis, tuberculosis or diabetes. The number of chronic conditions was summed and participants were placed into the following groups: '0', '1', '2' and '\(\times\)3' chronic conditions.

Family factors

Family Structure: Parental structure in the home was grouped as follows: 'living with both biological parents', 'living with one biological parent' or 'living with no biological parents'. The number of people living within the household (excluding the respondent) was grouped as '<3', '3 or 4', '5 or 6' or ' \geq 7'.

Family Socio-economic Status: The parents'/guardians' highest level of education was grouped as '<high school', 'high school graduate' or 'any post-secondary education'.

Family Culture: Respondents were asked "Who helps your child in understanding their culture?", with check boxes provided for several people, including parents, grandparents, aunts/uncles and other relatives. Based on the number of relative groups selected, participants were placed into the following groups: '0 relatives', '1 relative', '2 relatives' or '≥3 relatives'.

Community factors

Community Size: Based on the community of residence, participants were considered to live within a small (<300 people), a medium (300-1,499 people) or a large sized (≥1,500 people) First Nations community.

Community Culture: The number of community members who help the child understand their culture was assessed by asking "Who helps your child understand their culture?", with the following list provided: school teachers, community elders, and other community members. Positive responses for each item were given 1 point and negative responses 0 points. Points were summed to create the following groups: '0', '1', '2' and ' \geq 3' community members.

Physical activity

Respondents were asked to report whether or not their child had participated in 20 different common physical activities over the previous 12 months, including activities that reflect First Nations culture and tradition (e.g., berry picking, hunting/trapping, fishing, canoeing). For each activity, they were asked to report on the frequency and the typical duration of participation. This information was used to estimate the typical weekly minutes of

Table 1. Description of 6-11 year old child participants of the 2008/10 First Nations Regional Health Survey

Variable	N	% of total
Age (years)		
6-8	1550	47.5
9-11	1634	52.5
Gender		
Female	1625	50.8
Male	1556	49.2
Physical activity		
≥60 min/day of moderate-to-vigorous activity	2087	71.8
Participate in traditional First Nations activities	1734	53.6
Number of chronic conditions		
0	2175	59.2
1	679	20.4
2	203	6.5
≥3	124	3.9
Attend school		
No	24	0.8
Yes	3145	99.2
Knowledge of First Nations language		
Do not understand or speak	1383	43.5
Understand but do not use most often	1017	33.3
Understand and use most often in daily life	690	23.2
Parental structure		
Live with no biological parents	325	11.1
Live with 1 biological parent	1386	43.4
Live with both biological parents	1473	45.5
Community size		
<300 people	436	6.2
300-1,499 people	1737	51.7
≥1,500 people	1011	42.2

moderate-to-vigorous physical activity (MVPA). Because bowling and berry picking fall below the moderate intensity range (i.e., <4 times higher than resting energy expenditure),¹⁴ these activities were removed before summing the activities to determine the average daily minutes of MVPA. Children were placed into two groups based on adherence to the MVPA guideline of 60 minutes per day: 'physically inactive' and 'physically active'.¹⁵ Finally, to examine physical activity participation through a cultural lens, a 'yes' or 'no' group was created with regard to participation in at least one of the following traditional First Nations physical activities: berry picking, hunting/trapping, fishing, and canoeing/kayaking.

Statistical analysis

Analyses were conducted using IBM SPSS Complex Samples. All analyses took into account the multi-stage stratified design of the RHS by incorporating the design information into the models to adjust for the disproportionate sampling and cluster sampling. Initially, descriptive statistics were calculated for the study variables. Next, bivariate logistic regression analysis was used to determine whether each of the intrapersonal, family and community factor variables predicted each of the physical activity outcomes (e.g., accumulate ≥60 min/day of MVPA, participate in traditional physical activities). This was followed by multivariate logistic regression analysis. Three steps were used to determine the final multivariate model. In the first step, all of the intrapersonal factors were added to the model. These factors were only retained for the second step if they were significantly ($p \le 0.20$) related to the physical activity outcomes. In the second step, the family factors were added to the model. The factors that were significantly $(p \le 0.20)$ related to the physical activity outcomes in step 2 were retained for step 3. In the third step, the community factors were added to the model and all factors that were significantly ($p \le 0.20$) related to the physical activity outcomes were retained to create the final model. Because the analyses were exploratory, we selected a $p \le 0.20$ to ensure that all potential factors would be included in the final multivariate model, after controlling for other variables in subsequent steps.

RESULTS

A description of the First Nations child population is provided in Table 1. The majority of First Nations children have no chronic health conditions (59%), attend school (99%), at least partially understand and use a First Nations language (56%), live with at least one of their biological parents (89%), and live in a community with 300-1,499 people (52%). Based on parent reports, 72% of First Nations children engage in an average of at least 60 minutes/day of MVPA and 54% engaged in at least one traditional First Nations physical activity in the previous year.

The associations between intrapersonal, family and community factors and participation in ≥ 60 minutes/day of MVPA are shown in Table 2. After controlling for the other variables in the multivariate model, the odds ratio (OR) of being physically active were higher in 9-11 year olds (OR=1.34), children living in households with more people (OR=1.38, OR=1.30 and OR=1.71 for 3-4, 5-6 and ≥ 7 people in household respectively), and children who had community members helping them understand their culture (OR=1.36, OR=1.97 and OR=3.01 for 1, 2 and ≥ 3 community members respectively). None of the other intrapersonal, family or community factors was a significant independent predictor of engaging in an average of ≥ 60 minutes/day of MVPA.

Table 3 shows the associations between intrapersonal, family and community factors and participation in traditional First Nations physical activities (e.g., berry picking, hunting/trapping, fishing, canoeing/kayaking). The significant independent predictors among the intrapersonal factors were school attendance (OR=2.27) and understand and use a First Nations language most often in daily life (OR=1.65). As for the family factors, the multivariate analyses revealed that children with a parent with at least some post-secondary education had an increased odds (OR=1.33) of participating in a traditional First Nations physical activity in the year prior to the survey. At the community level, OR increased for children from smaller communities (OR=1.49 for communities with 300-1,499 people, OR=2.30 for communities with <300 people) and for children who had more community members help them understand their culture (OR=2.14 for 2 community members, OR=1.83 for \geq 3 community members).

DISCUSSION

Results from the RHS suggest that when averaged across all days of the year, 72% of First Nations children accumulate at least 60 minutes/day of MVPA. This statistic is encouraging given the many health benefits associated with physical activity. However, this should not be interpreted as meaning that the majority of First Nations children meet Canadian¹⁵ or global¹⁶ physical activity guidelines, both of which recommend that school-aged children accumulate 60 minutes of MVPA on a *daily* basis, as accumulating 60 minutes on a daily basis is not the same as averaging 60 minutes over several days. The importance of this distinction is highlighted in findings from the 2007-2009

Table 2. Associations between intrapersonal, family and community factors and participation in 60 min/day of moderate-to-vigorous physical activity in 6-11 year old child participants of the 2008/10 First Nations Regional Health Survey

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Variable	%	Bivariate OR (95% CI)*	Multivariate OR (95% CI)†
Intrapersonal factors		OR (23 % CI)	(>3 /6 Ci)/
Age (years)			
6-8	68.7	1 (referent)	1 (referent)
9-11	74.6	1.34 (1.10-1.63)	1.34 (1.11-1.62)
Gender	7 1.0	1.54 (1.10-1.05)	1.54 (1.11-1.02)
Female	70.3	1 (referent)	1 (referent)
Male	73.3	1.15 (1.15-1.41)	1.17 (0.96-1.43)
Number of chronic conditions	75.5	1.15 (1.15-1.41)	1.17 (0.20-1.43)
0	71.6	1 (referent)	N/A
1	72.8	1.06 (0.83-1.37)	IN/A
2	72.6 71.6	1.00 (0.83-1.37)	
2 ≥3	70.7	0.96 (0.61-1.52)	
Attend school	70.7	0.90 (0.01-1.32)	
	65.2	1 (referent)	N/A
No Yos		1 (referent)	IN/A
Yes	71.8	1.36 (0.51-3.63)	
Knowledge of First Nations language	60.0	1 (NI/A
Do not understand or speak	68.9	1 (referent)	N/A
Understand and use most often in daily life	71.9	1.15 (0.88-1.51)	
Understand but do not use most often	74.8	1.34 (1.04-1.72)	
Importance of First Nations culture	75.0		
Not important	75.3	1 (referent)	N/A
Not very important	67.7	0.69 (0.35-1.34)	
Somewhat important	69.7	0.76 (0.44-1.29)	
Very important	72.8	0.88 (0.52-1.48)	
Family factors			
Parental structure			
Live with no biological parents	64.4	1 (referent)	N/A
Live with 1 biological parent	73.7	1.41 (0.99-1.99)	
Live with both biological parents	71.8	1.55 (1.06-2.27)	
# People in household (excluding child)			
<3	62.2	1 (referent)	1 (referent)
3-4	64.1	1.26 (0.92-1.69)	1.38 (1.01-1.89)
5-6	68.0	1.25 (0.91-1.73)	1.30 (0.94-1.81)
≥7	72.5	1.60 (1.02-2.50)	1.71 (1.12-2.63)
Parental education		,	, ,
<high graduate<="" school="" td=""><td>66.3</td><td>1 (referent)</td><td>1 (referent)</td></high>	66.3	1 (referent)	1 (referent)
High school graduate	68.2	1.25 (0.96-1.64)	1.27 (0.97-1.67)
≥Some post-secondary	64.2	0.92 (0.72-1.16)	0.88 (0.69-1.13)
# Relatives who help child understand culture		,	,
0	74.8	1 (referent)	
1	64.1	0.60 (0.41-0.90)	
2	70.2	0.80 (0.52-1.23)	
≥3	76.2	1.08 0.73-1.60)	
Community Factors			
Community size			
≥1,500 people	69.9	1 (referent)	
300-1,499 people	73.2	1.18 (0.92-1.50)	
<300 people	72.7	1.15 (0.78-1.68)	N/A
# Community members who help child understand culture		(0 0)	, .
0	66.1	1 (referent)	1 (referent)
1	71.4	1.26 (0.99-1.60)	1.36 (1.08-1.72)
2	77.1	1.70 (1.20-2.41)	1.97 (1.40-2.77)
2 ≥3	82.8	2.43 (1.64-3.59)	3.01 (2.04-4.45)
	02.0	2.13 (1.04-3.37)	3.01 (2.0 1 7.73)

^{*} Bivariate odds ratio (95% confidence interval).

Bold numbers indicate statistically significant odds ratios ($p \le 0.05$).

Canadian Health Measures Survey, which measured MVPA objectively using accelerometers. The findings from that survey indicate that the average daily MVPA in the mainstream 6-10 year old population is 62 minutes/day, but that only 11% of these children accumulate 60 minutes of MVPA on a daily basis and meet physical activity guidelines. Similarly, Lemstra and colleagues found that only 6% of a small sample of 10-12 year old Saskatoon Tribal Council First Nations on-reserve children met physical activity guidelines.

Apart from age, with children aged 9-11 years being more likely to be active than 6-8 year olds, no other intrapersonal factors were associated with MVPA in First Nations children. Approximately 10% of First Nations children had more than one chronic condition and 1% did not attend school; the smaller proportion of these risk factors in the study may in part explain

why they were not significant correlates of MVPA or traditional physical activities.

Consistent with previous reviews that have included social and environmental factors, 17 many of the family-level and community-level factors examined in our analyses of First Nations children were not consistently independently associated with MVPA or traditional physical activities. Cultural factors at each of these levels were most consistently associated with MVPA and traditional First Nations physical activities; both factors reflected the number of people (i.e., family and community members) who help the child understand their culture. In general, children with more cultural support were more likely to be active and children with less cultural support were less likely to be active. This finding is compatible with related research showing that culture is important in

[†] Multivariate odds ratio (95% confidence interval) adjusted for other intrapersonal, family and community factors. N/A = not applicable as variable not included in final multivariate model.

Table 3. Associations between intrapersonal, family and community factors and participation in traditional First Nations physical activities in 6-11 year old child participants of the 2008/10 First Nations Regional Health Survey

Variable	%	Bivariate OR (95% CI)*	Multivariate OR (95% CI)†
Intrapersonal factors		C. (FC /C C.)	(20 10 0.7)
Age (years)			
6-8	53.1	1 (referent)	1 (referent)
9-11	54.1	1.04 (0.87-1.24)	1.03 (0.85-1.24)
Gender		,	,
Female	55.7	1 (referent)	1 (referent)
Male	51.5	0.84 (0.70-1.02)	0.86 (0.70-1.05)
Number of chronic conditions		,	•
0	51.8	1 (referent)	N/A
1	57.2	1.24 (0.98-1.57)	
2	58.6	1.30 (0.83-2.02)	
≥3	60.3	1.41 (0.93-2.14)	
Attend school			
No	24.5	1 (referent)	1 (referent)
Yes	53.8	3.60 (1.16-8.00)	2.27 (1.07-4.79)
Knowledge of First Nations language			
Do not understand or speak	46.8	1 (referent)	1 (referent)
Understand and use most often in daily life	60.6	1.75 (1.38-2.22)	1.65 (1.28-2.13)
Understand but do not use most often	55.7	1.43 (1.11-1.84)	1.30 (0.99-1.71)
Importance of First Nations culture			
Not important	51.3	1 (referent)	N/A
Not very important	46.8	0.83 (0.49-1.42)	
Somewhat important	50.5	0.97 (0.60-1.56)	
Very important	57.3	1.27 (0.81-1.99)	
Family factors			
Parental structure			
Live with no biological parents	48.4	1 (referent)	N/A
Live with 1 biological parent	54.8	1.29 (0.93-1.80)	
Live with both biological parents	53.8	1.24 (0.91-1.69)	
# People in household (excluding child)			
<3	39.9	1 (referent)	N/A
3-4	42.2	1.05 (0.84-1.31)	
5-6	41.2	0.94 (0.74-1.21)	
≥7	37.9	1.19 (0.86-1.65)	
Parental education	260	1 (()	4 / 6
<high graduate<="" school="" td=""><td>36.0</td><td>1 (referent)</td><td>1 (referent)</td></high>	36.0	1 (referent)	1 (referent)
High school graduate	39.2	1.02 (0.80-1.30)	0.90 (0.70-1.16)
≥Some post-secondary	50.3	1.43 (1.13-1.80)	1.33 (1.05-1.68)
# Relatives who help child understand culture	42.4	1 (()	21/4
0	42.4	1 (referent)	N/A
1	48.3	1.27 (0.88-1.81)	
2	53.3	1.55 (1.08-2.23)	
≥3 Community fortons	59.5	2.00 (1.37-2.91)	
Community factors			
Community size	47.7	1 (referent)	1 (referent)
≥1,500 people 300-1,499 people	47.7 56.9	1 (referent) 1.45 (1.15-1.83)	1 (referent) 1.49 (1.17-1.89)
<300 people	56.9 66.6	2.19 (1.63-2.93)	2.30 (1.67-3.17)
# Community members who help child understand culture	0.00	2.17 (1.03-2.73)	2.30 (1.07-3.17)
# Community members who help child understand culture 0	45.8	1 (referent)	1 (referent)
1	52.4	1.30 (1.02-1.65)	1.17 (0.92-1.49)
2	52. 4 67.4	2.45 (1.79-3.33)	2.14 (1.53-2.98)
2 ≥3	63.4	2.45 (1.79-3.33) 2.05 (1.38-3.03)	1.83 (1.22-2.75)
∠J	03.4	2.03 (1.30-3.03)	1.03 (1.22-2./3)

^{*} Bivariate odds ratio (95% confidence interval).

N/A = not applicable as variable not included in final multivariate model. **Bold** numbers indicate statistically significant odds ratios ($p \le 0.05$).

understanding health and health behaviours in First Nations youth and adults.^{5,18} This finding warrants further investigation given that parent/guardian perceptions of the importance of traditional cultural events in their child's life was not independently associated with MVPA or traditional physical activities.

Physical activity is often perceived as good medicine among Aboriginal peoples, and traditional activities are considered especially relevant in this regard.⁶ To this end, our findings suggest that 54% of First Nations children engaged in a traditional First Nations physical activity in the year prior to the survey. Two of the five factors that were significant independent predictors of involvement in traditional physical activities were about culture. Specifically, knowledge of a First Nations language and high levels of community cultural support emerged as being

the relevant predictors of participation in traditional physical activity. It may be that traditional physical activities are pursued as a way to preserve and promote traditional cultural practices in general.⁶

The current analysis provides new insight into physical activity correlates among 6-11 year olds living in First Nations on-reserve communities and has applications for future research and for designing interventions. By focusing on First Nations children, this analysis conforms to recommendations that research of Aboriginal health and health behaviours focus on specific Aboriginal groups, rather than grouping First Nations, Métis and Inuit peoples together. The findings also confirm the relevance of examining correlates of physical activity using an ecological lens. This ecological view provides insight into the design of interventions for promoting an active lifestyle among

[†] Multivariate odds ratio (95% confidence interval) adjusted for other intrapersonal, family and community factors.

First Nations children. Specifically, the findings imply that physical activity interventions are more likely to be successful if they include components that address intrapersonal, interpersonal and community factors.

Some limitations should be acknowledged. Parent-reported physical activity is known to be over-reported and only modestly correlated to physical activity measured objectively using accelerometers and heart rate monitoring.²⁰ Thus, the proportion of First Nations children meeting the ≥60 minutes/day MVPA target was likely lower than what was reported here, and the association between the 12 independent variables and the 2 physical activity outcomes were likely underestimated. Specificity about the types of traditional activities performed was also lost in this analysis because response options for berry picking, hunting/trapping, fishing, and canoeing/kayaking were grouped. Given the important differences in energy expenditure required to engage in these activities,21,22 future research should consider distinguishing between activity types. In addition, traditional activities such as drumming and traditional dancing were not measured within the context of physical activity. Finally, analyses were constrained by the limitations inherent in the secondary analysis of surveillance data.

In conclusion, correlates of physical activity among First Nations children residing in First Nations communities in Canada were examined using an ecological analysis. Participation in MVPA and traditional First Nations physical activities was affected by multiple intrapersonal, interpersonal and environmental factors. Having multiple community members helping the child understand their culture was a particularly strong correlate of both MVPA and traditional physical activities.

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RÉSUMÉ

OBJECTIFS: L'activité physique a de nombreux avantages sur le plan mental, émotionnel, spirituel et physique. Les facteurs qui influencent l'activité physique chez les enfants des Premières Nations sont insuffisamment étudiés. Notre objectif était d'examiner les associations entre plusieurs facteurs intrapersonnels, familiaux et communautaires et l'activité physique chez les enfants des Premières Nations d'âge scolaire résidant dans des communautés des Premières nations.

MÉTHODE: Les participants étaient 3 184 enfants (6-11 ans) de l'Enquête régionale longitudinale sur la santé des Premières Nations de 2008-2010, soit un échantillon représentatif de personnes des Premières Nations résidant dans les réserves et les communautés nordiques des Premières nations. L'enquête aborde un éventail complet de questions de santé. Les principales personnes à s'occuper des enfants se sont prêtées à des entretiens pour évaluer l'activité physique modérée à vigoureuse (APMV) de chaque enfant, sa participation aux activités physiques traditionnelles, six facteurs intrapersonnels, quatre facteurs familiaux et deux facteurs communautaires.

RÉSULTATS: D'après les principales personnes à s'occuper des enfants, 72 % des enfants accumulaient en moyenne ≥60 minutes d'APMV par jour, et 54 % avaient pris part à au moins une forme d'activité physique traditionnelle des Premières Nations au cours de l'année écoulée. L'âge plus avancé, les ménages plus nombreux et le plus grand nombre de proches pouvant aider l'enfant à connaître sa culture étaient des facteurs indépendamment associés à l'accumulation de ≥60 minutes d'APMV. La fréquentation scolaire, l'utilisation de langues des Premières Nations, l'instruction secondaire des parents, la taille plus petite de la communauté et le plus grand nombre de membres de la communauté pouvant aider l'enfant à connaître sa culture étaient des facteurs indépendamment associés à la participation aux formes traditionnelles d'activité physique des Premières Nations.

CONCLUSION: Chez les enfants des Premières Nations, il y a plusieurs corrélats de l'activité physique à divers niveaux écologiques.

MOTS CLÉS: enfant; activité motrice; population d'origine amérindienne; enquêtes de santé; Canada