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October 2007

Physical Activity and Sports Outside of Class Hours Among Children Six Years of Age

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The beneficial effects of an appropriate level of physical activity on the health and development of children is well-known. Indeed, physical activity is a key factor in maintaining a healthy weight and has various positive effects on physical growth,¹ psychological well-being, self-esteem and academic performance.² The fact that children 5 to 10 years of age are not as active as they should be in terms of fostering optimum growth and development, as revealed in the results of the Canadian Physical Activity Levels Among Youth (CAN PLAY) Survey 2005-2006, remains a major concern.³

How are Québec children 6 years of age doing in terms of physical activity and sports, at an age which is crucial for the development of healthy lifestyle habits? Data collected in 2004 as part of the Québec Longitudinal Study of Child Development (QLSCD) has provided the basis for some answers to this question.⁴ Part of the survey focused on whether children used a physically active means of getting to school, such as walking or cycling.

Getting to school

The distribution of 6-year-old children by various indicators of physical activity is shown in Table 1. A total of 15%, boys and girls combined, went to school solely on foot or by bicycle. In addition to this, a certain proportion of children used various means of transport (7%) that could include walking or cycling.

More boys than girls engage in physical activity and sports outside of school hours

As reported by parents, almost two-thirds of children in kindergarten (65%) had engaged in physical activity or non-organized sports outside of school hours at least a few times a week in the year preceding the survey, of whom about 32% did so nearly every day. At least once a week, over a quarter (28%) had participated in sports with a coach or instructor, and a similar proportion (25%) had taken lessons or participated in physical activity courses such as dance, gymnastics, martial arts or circus arts.

In general, girls were less active and were not involved in the same type of activities. The gender difference was particularly observed in participation in organized sports, with a higher proportion of boys engaging in these.

Table 1
Participation of 6-Year-Old Children¹ in Various Types of Physical Activity and Sports Outside of School Hours,² by Sex, Québec, 2004

	Boys	Girls	Total
	%		
Means of getting to school			
Only by walking or cycling	15.4	13.5	14.5
Other	77.6	79.9	78.8
Multiple means	7.0	6.6	6.8
Participation in physical activity or non-organized sports with no coach or instructor (past 12 months)^a			
Almost every day	35.3	27.7	31.5
A few times a week	33.5	33.2	33.4
About once a week	12.5	18.8	15.7
About once a month	4.7*	5.8*	5.3
Almost never	13.9	14.5	14.2
Participation in organized sports with a coach or instructor (excluding dance and gymnastics) (past 12 months)^a			
More than once a week	18.8	8.6	13.7
About once a week	13.7	14.0	13.9
One or two sessions	17.3	15.8	16.5
About once a month or almost never ³	50.2	61.7	55.9
Participation in other organized lessons or classes with a coach or instructor involving physical activity (dance, gymnastics, martial arts or circus arts) (past 12 months)^a			
More than once a week	6.7*	7.6	7.1
About once a week	11.2	25.2	18.2
One or two sessions	6.7*	12.4	9.5
About once a month or almost never ³	72.3	54.9	65.1

1. Children born in 1997-1998 in Québec.
 2. As reported by the PMK (Person Most Knowledgeable about the child).
 3. These two categories were grouped together because of the small numbers involved in the category "about once a month" (less than 1%).
 a. Chi-square test for sex differences significant at the threshold of 0.05.
 * Coefficient of variation between 15% et 25%; interpret with caution.
 Source: Institut de la statistique du Québec, QLSCD 1998-2010.

1. KOHL, H. W., and K. E. HOBBS (1998). "Development and Physical Activity Behaviors Among Children and Adolescents," *Pediatrics*, vol. 101, p. 549-554.
 2. For example, see SHEPHARD, R. J. (1996). "Habitual physical activity and academic performance," *Nutrition Reviews*, vol. 54, n°. 4 (supplement), p. S32-36.
 3. CAMERON, C., R. WOLFE and C. L. CRAIG (2007). *Physical Activity and Sport: Encouraging Children to be Active*, Ottawa, Canadian Fitness and Lifestyle Research Institute, 218 p.
 4. Almost all the children were finishing kindergarten (96%).

Inequalities in participation according to socioeconomic status and perception of social cohesion in the neighbourhood

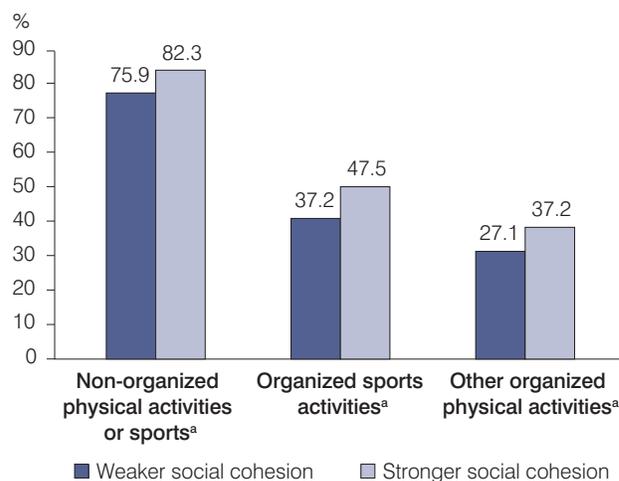
Children from low-income families were significantly less likely to participate in physical activity or organized sports outside of school hours. For example, only a quarter (24%) of children in low-income families had participated once a week or more (including one or two sessions) in organized sports in the year preceding the survey compared to half (50%) of children in higher income families. In terms of other physical activity lessons or classes with a coach or instructor, these proportions were 19% and 39% respectively. However, participation in non-organized physical activities did not significantly vary with household income. The above results suggest that the costs related to organized sports could in part explain the lower participation rate among children from disadvantaged families.

Location of the children's home also seemed to foster participation in physical activity. Irrespective of whether the physical activities were organized or not, participation was lower among children who were living in neighbourhoods with a lower level of social cohesion reported by the parents, namely where neighbours were perceived as being less likely to help each other and monitor the safety and security of children (Figure 1).

Towards a more complete assessment of physical activity among children in elementary school

The results presented here paint a partial portrait of the physical activity level of young children. In the 2006 round of the QLSCD, when the children were eight years old, more detailed questions were asked of the parents with regards to physical activities outside school hours. Tests were also administered to the children to assess their physical condition. The data from this round will provide a better picture of the level of physical activity and physical condition of children in early elementary school, and will be examined in light of potential associations with their health status, weight and academic performance.

Figure 1
Proportion of 6-Year-Old Children¹ Engaging in Various Physical Activities and Sports Outside of School Hours at Least Once a Week in the 12 Months Preceding the Survey,² by Parent's Perception of Social Cohesion in the Neighbourhood,³ Québec, 2004



- Children born in 1997-1998 in Québec.
- Including one or two sessions in the case of organized sports.
- Based on five questions posed to parents on the level of support and mutual help in the neighbourhood. The category "weaker social cohesion" comprises children whose parents' scores were in the lowest quartile (25 %) of the scale.

a. Chi-square test significant at the threshold of 0.05

Source: Institut de la statistique du Québec, QLSCD 1998-2010.

About the survey

The Québec Longitudinal Study of Child Development (QLSCD 1998-2010) is conducted by the Institut de la statistique du Québec (ISQ) in collaboration with various partners. The Study is financed by the ministère de la Santé et des Services sociaux, the ministère de la Famille et des Aînés, the Fondation Lucie et André Chagnon, and the ISQ. The main objective of this study is to understand pathways and to identify the factors that, during early childhood, contribute to social adjustment and the educational achievement of Québec children when they enter the school system.

More information about the survey may be found on the QLSCD web site, also known as "I am, I'll be", at www.jesuisjserai.stat.gouv.qc.ca.

For access to the microdata file for the survey, contact the Research Data Access Centre of the ISQ (Centre d'accès aux données de recherche de l'ISQ – CADRISQ) at www.stat.gouv.qc.ca/cadrisq, or call 1 514 343-2299.

This fact sheet, translated by James Lawler, is also available in French under the title « La pratique d'activités physiques et sportives en dehors des heures de classe chez les enfants de 6 ans ».

This bulletin was designed by Direction Santé Québec

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The PDF version of this bulletin is available on the web site of the ISQ at: www.stat.gouv.qc.ca

Legal deposit

Library and Archives Canada
Bibliothèque et Archives nationales du Québec
4th Quarter 2007

ISSN 1913-4851 (printed version)
ISSN 1913-486X (on-line version)

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Institut de la statistique du Québec, 2007

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de la statistique
Québec