

## Article

# Organized extracurricular activities of Canadian children and youth

by Anne Guèvremont, Leanne Findlay and Dafna Kohen

September, 2008



# Organized extracurricular activities of Canadian children and youth

by Anne Guèvremont, Leanne Findlay and Dafna Kohen

## Abstract

This article presents rates of participation in organized extracurricular activity by Canadian children and youth aged 6 to 17 years, and examines how these rates vary by socio-demographic and socio-economic characteristics. The data are from Cycle 4 of the National Longitudinal Survey of Children and Youth (2000/2001). The majority of children and youth (86%) participated in at least one extracurricular activity. Girls were more likely than boys to be involved in non-sport activities and in clubs or community groups. Young children who lived in urban areas and those who lived with two parents had relatively high rates of participation in extracurricular activities. Participation rose with family income for children aged 6 to 13, but not for 14- to 17-year-olds. Children of all ages in the Western provinces had high participation rates in each type of activity; rates tended to be low in Quebec.

## Keywords

adolescents, child development, extracurricular activities, sports

## Authors

Anne Guèvremont (613-957-4564; anne.guevremont@hrsc-rhdsc.gc.ca) conducted this research while with the Health Information and Research Division at Statistics Canada; Leanne Findlay (613-951-4648; Leanne.Findlay@statcan.gc.ca) and Dafna Kohen (613-951-3346; Dafna.Kohen@statcan.gc.ca) are with the Health Information and Research Division at Statistics Canada in Ottawa, Ontario, K1A 0T6.

Children's participation in organized extracurricular activities has been associated with positive short- and long-term outcomes, such as academic achievement and prosocial behaviours, and with reduced negative outcomes, such as dropping out of school and emotional and behavioural disorders.<sup>1-4</sup>

The likelihood that children will take part in organized extracurricular activities varies by factors such as their age and gender, family income, and family structure (one- or two-parent family).<sup>3,5,6</sup> Older children, children from higher-income families, and those living with two parents have been shown to have higher participation rates. However, much of this research was conducted in the United States; the most recent Canadian study was based on 1994/1995 data and covered only 6- to 11- year-olds.<sup>3</sup>

This article presents data for 6- to 17-year-olds from the 2000/2001 National Longitudinal Survey of Children and Youth (NLSCY). Rates of participation in sports, non-sport activities, and clubs or community groups are examined, along with how these rates vary by socio-demographic characteristics such as gender and family income (see *The data*).

## Majority participate

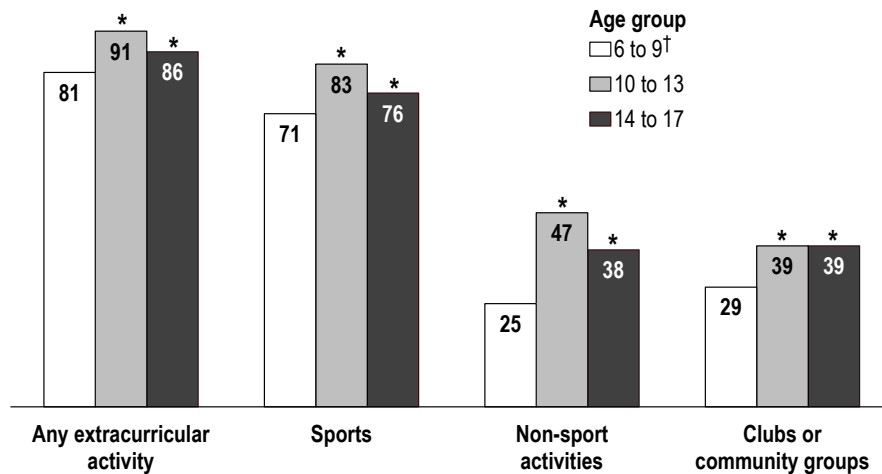
In 2000/2001, a large majority (86%) of Canadian children and teens were reported to have taken part in at least one organized extracurricular activity during the previous year (Figure 1). Participation rates were significantly higher at ages 10 to 13 (91%) and 14 to 17 (86%) than at ages 6 to 9 (81%). A considerably larger proportion of children and youth participated in organized sports than in non-sport activities and in clubs or community groups.

## Gender

Overall, boys and girls were equally likely to have taken part in at least one organized extracurricular activity (86% of girls and 85% of boys). However, participation rates in the various types of activity differed by gender.

At ages 6 to 9, boys were more likely than girls to play organized sports, but at older ages, participation rates in sports did not differ significantly by gender

**Figure 1**  
**Percentage who participated in organized extracurricular activity, by age group and type of activity, household population aged 6 to 17, Canada, 2000/2001**



† reference category

\* significantly different from estimate for reference category ( $p < 0.05$ )

Source: National Longitudinal Survey of Children and Youth, 2000/2001.

(Table 1). At all ages, a larger proportion of girls than boys were involved in non-sport activities and in clubs or community groups.

### Living with one or two parents

Family structure was associated with playing organized sports at ages 6 to 9 and 14 to 17. Nearly three-quarters (74%) of 6- to 9-year-olds who lived with two parents played sports, compared with 58% of those living with one parent. At ages 14 to 17, the corresponding figures were 78% and 69%.

By contrast, family structure was not significantly related to children's and teens' involvement in non-sport activities and in clubs or community groups.

## The data

The data are from the National Longitudinal Survey of Children and Youth (NLSCY), a comprehensive survey of Canadian children's development and factors that have an impact on their well-being.<sup>7</sup> Cycle 4, which was conducted in the fall of 2000 and in the spring of 2001, was selected for this analysis because it is the most recent NLSCY cycle that provides nationally representative, cross-sectional data for a sample of children aged 6 to 17, including information on a variety of socio-demographic and socio-economic characteristics of the family and children's participation in various activities. This analysis pertains to 5,242 children aged 6 to 9 (representing 1,495,358 children) and 6,926 children and teens aged 10 to 17 (representing 2,889,183 youth).

Information about participation in organized extracurricular activities was reported by parents for 6- to 9-year-olds, and self-reported by 10- to 17-year-olds. Youth not attending school at the time of the survey (about 10% of 16- and 17-year-olds) and children not yet in school (3% of 6- to 9-year-olds) were excluded from this analysis because they had more disposable time and would not be comparable.

Most NLSCY questions about the frequency of participation in various activities referred to the previous 12 months. The exception was questions asked of 14- to 17-year-olds about school-related activities, which concerned the last 3 months. Response categories for parents of 6- to 9-year-olds were: "almost never," "about once a month," "about once a week," "a few times a week," and "most days." Response categories for 10- to 17-year-olds were: "never," "less than once a week," "1 to 3 times a week," and "4 or more times a week." Responses of "almost never" and "never" were categorized as non-participation; all other responses were categorized as participation in an extracurricular activity.

Three types of organized activity were examined: sports, non-sport activities, and clubs or community groups. Two questions were asked about sports: participation in sports with a coach or instructor, and participation or instruction in other physical activities such as dance, gymnastics and martial arts with a coach or instructor. These activities were aggregated into a single variable, *organized sports*. *Non-sport activities* include lessons (other than in class) in music, art, drama, etc. *Clubs or community groups* refer to associations such as Brownies, Guides, Cubs, Scouts, church groups, and 4-H. Youth aged 14 to 17 were asked about participation in both school-related (but out of class) activities such as yearbook club, photography club and student council, and in out-of-school activities. The Appendix contains the full wording of the questions.

The socio-demographic and socio-economic factors examined in relation to extracurricular activities were: age, gender, region (the eastern provinces of Newfoundland and Labrador, New Brunswick, Nova Scotia and Prince Edward Island; Quebec; Ontario; and the Western provinces of British Columbia, Alberta, Saskatchewan, and Manitoba), urban or rural residence (urban areas were defined as areas with a population of at least 1,000 and a minimum of 400 people per square kilometre), whether the child lived with one or two parents, and the ratio of family income to the low income cut-off (LICO). The LICO is a statistical measure of the income thresholds below which families likely devote a larger-than-average share of their income to the necessities of food, shelter and clothing.<sup>8</sup> To reflect differences in costs for different community and family sizes, LICOs are defined for five community size categories and seven family size categories.

Participation rates by socio-demographic characteristics were tested for statistical differences with t-tests. All analyses were weighted using a normalized population weight, and variance estimation used the bootstrap technique to account for the complex survey design.<sup>9-11</sup>

**Table 1**  
**Percentage who participated in organized extracurricular activity, by age group, type of activity and selected characteristics, household population aged 6 to 17, Canada, 2000/2001**

|                                   | Any extra-curricular activity | Type of activity |                      |                           |
|-----------------------------------|-------------------------------|------------------|----------------------|---------------------------|
|                                   |                               | Sports           | Non-sport activities | Clubs or community groups |
| <b>Total</b>                      | <b>85.5</b>                   | <b>76.4</b>      | <b>35.7</b>          | <b>35.0</b>               |
| <b>Age</b>                        |                               |                  |                      |                           |
| 6 to 9 <sup>†</sup>               | 80.9                          | 70.7             | 24.8                 | 29.1                      |
| 10 to 13                          | 90.9*                         | 83.5*            | 46.9*                | 38.8*                     |
| 14 to 17                          | 85.8*                         | 76.2*            | 38.0*                | 38.6*                     |
| <b>Gender</b>                     |                               |                  |                      |                           |
| Age 6 to 9                        |                               |                  |                      |                           |
| Male <sup>†</sup>                 | 82.4                          | 73.9             | 20.4                 | 25.6                      |
| Female                            | 79.3                          | 67.5*            | 29.3*                | 32.7*                     |
| Age 10 to 13                      |                               |                  |                      |                           |
| Male <sup>†</sup>                 | 89.1                          | 81.5             | 39.5                 | 31.7                      |
| Female                            | 92.7*                         | 85.4             | 54.3*                | 45.8*                     |
| Age 14 to 17                      |                               |                  |                      |                           |
| Male <sup>†</sup>                 | 84.9                          | 77.8             | 27.8                 | 30.1                      |
| Female                            | 86.7                          | 74.6             | 48.2*                | 46.9*                     |
| <b>Family structure</b>           |                               |                  |                      |                           |
| Age 6 to 9                        |                               |                  |                      |                           |
| One parent                        | 71.9*                         | 58.3*            | 20.5                 | 25.4                      |
| Two parents <sup>†</sup>          | 82.9                          | 73.6             | 25.8                 | 30.0                      |
| Age 10 to 13                      |                               |                  |                      |                           |
| One parent                        | 89.6                          | 82.3             | 48.5                 | 34.7                      |
| Two parents <sup>†</sup>          | 91.2                          | 83.7             | 46.7                 | 39.7                      |
| Age 14 to 17                      |                               |                  |                      |                           |
| One parent                        | 79.9*                         | 69.2*            | 32.1                 | 33.1                      |
| Two parents <sup>†</sup>          | 87.4                          | 78.2             | 39.5                 | 40.0                      |
| <b>Family income</b>              |                               |                  |                      |                           |
| Age 6 to 9                        |                               |                  |                      |                           |
| Below LICO <sup>†</sup>           | 64.4                          | 48.7             | 17.8                 | 22.0                      |
| One to less than two times LICO   | 78.5*                         | 66.1*            | 22.2                 | 27.5                      |
| Two to less than three times LICO | 88.2*                         | 82.3*            | 25.7*                | 30.5                      |
| Three or more times LICO          | 93.6*                         | 87.9*            | 36.4*                | 36.9*                     |
| Age 10 to 13                      |                               |                  |                      |                           |
| Below LICO <sup>†</sup>           | 82.8 <sup>E</sup>             | 71.8             | 38.0                 | 38.5                      |
| One to less than two times LICO   | 90.5*                         | 82.4*            | 46.5                 | 39.8                      |
| Two to less than three times LICO | 91.6*                         | 84.4*            | 46.1                 | 39.0                      |
| Three or more times LICO          | 96.5*                         | 92.1*            | 54.8*                | 37.7                      |
| Age 14 to 17                      |                               |                  |                      |                           |
| Below LICO <sup>†</sup>           | 82.9                          | 72.5             | 32.1                 | 40.3                      |
| One to less than two times LICO   | 80.8                          | 71.1             | 32.6                 | 37.5                      |
| Two to less than three times LICO | 89.6                          | 78.6             | 39.6                 | 37.9                      |
| Three or more times LICO          | 89.1                          | 81.7             | 44.6*                | 39.9                      |
| <b>Area of residence</b>          |                               |                  |                      |                           |
| Age 6 to 9                        |                               |                  |                      |                           |
| Urban                             | 81.4*                         | 71.5*            | 25.7*                | 29.0                      |
| Rural <sup>†</sup>                | 77.0                          | 65.4             | 18.5                 | 29.9                      |
| Age 10 to 13                      |                               |                  |                      |                           |
| Urban                             | 90.7                          | 83.5             | 46.8                 | 38.4                      |
| Rural <sup>†</sup>                | 91.8                          | 83.0             | 47.7                 | 40.9                      |
| Age 14 to 17                      |                               |                  |                      |                           |
| Urban                             | 86.4                          | 77.2*            | 38.1                 | 39.1                      |
| Rural <sup>†</sup>                | 82.3                          | 70.1             | 37.4                 | 35.2                      |
| <b>Region</b>                     |                               |                  |                      |                           |
| Age 6 to 9                        |                               |                  |                      |                           |
| East                              | 80.1                          | 62.9             | 22.8                 | 48.0*                     |
| Quebec                            | 73.0*                         | 65.0             | 17.9*                | x                         |
| Ontario                           | 83.3                          | 72.9             | 27.2                 | 32.9                      |
| West <sup>†</sup>                 | 83.8                          | 74.1             | 27.2                 | 35.3                      |
| Age 10 to 13                      |                               |                  |                      |                           |
| East                              | 93.8                          | 84.0             | 52.6                 | 51.1                      |
| Quebec                            | 88.4*                         | 81.2             | 36.1*                | 23.2 <sup>E*</sup>        |
| Ontario                           | 89.8                          | 83.4             | 48.6                 | 41.3                      |
| West <sup>†</sup>                 | 93.9                          | 85.6             | 53.2                 | 46.7                      |
| Age 14 to 17                      |                               |                  |                      |                           |
| East                              | 83.5*                         | 73.4*            | 39.9                 | 43.3                      |
| Quebec                            | 78.4*                         | 72.2*            | 30.2*                | 26.6*                     |
| Ontario                           | 86.4*                         | 75.6             | 35.6*                | 37.6*                     |
| West <sup>†</sup>                 | 90.9                          | 80.7             | 46.4                 | 47.1                      |

<sup>†</sup> reference category

\* significantly different from estimate for reference category ( $p < 0.05$ )

<sup>E</sup> use with caution (coefficient of variation 16.6% to 33.3%)

x suppressed to meet the confidentiality requirements of the Statistics Act

Source: National Longitudinal Survey of Children and Youth, 2000/2001.

## Family income

Participation in organized extracurricular activities varied by family income, especially for young children (Figure 2). At ages 6 to 9, an income gradient in participation rates was evident for each type of activity. For example, 88% of 6- to 9-year-olds from the highest income families had participated in organized sports the previous year, compared with 49% of those from the lowest income families.

Sports participation also varied by family income for 10- to 13-year-olds: over 92% of those from the highest income families had played organized sports, compared with 72% from the lowest income families.

Among 14- to 17-year-olds, those from the highest income families were more likely to take part in non-sport activities than were youth from the lowest income families, but participation in sports and in clubs or community groups did not vary by family income.

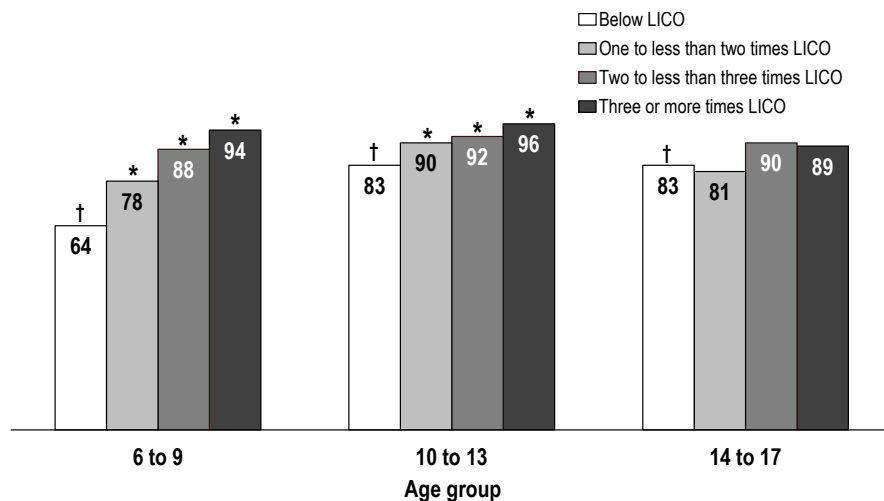
## Urban/Rural residence

Urban versus rural residence was related to the extracurricular activities of the youngest children, but the association diminished at older ages. Children aged 6 to 9 in urban areas were generally more likely than those in rural areas to participate in organized sports and in non-sport activities. As well, urban youth aged 14 to 17 were significantly more likely than those in rural areas to play organized sports. Urban versus rural residence was not significantly associated with the extracurricular activities of children aged 10 to 13.

## Region

Participation in organized extracurricular activities tended to be low for children and teens in Quebec, compared with those in the Western provinces. Relatively small proportions of Quebec children aged 6 to 9 and 10 to 13 took part in non-sport activities. And for Quebec youths aged 14 to 17,

**Figure 2**  
**Percentage who participated in at least one extracurricular activity, by age group and ratio of family income to low-income cutoff (LICO), household population aged 6 to 17, Canada, 2000/2001**



† reference category

\* significantly different from estimate for reference category ( $p < 0.05$ )

Source: National Longitudinal Survey of Children and Youth, 2000/2001.

participation rates were low not only in non-sport activities and in clubs or community groups, but also in sports.

As well, 14- to 17-year-olds in the Eastern provinces were significantly less likely than those in the Western provinces to play organized sports. In Ontario, youth of these ages were less likely to participate in non-sport activities and in clubs or community groups.

### Conclusion

In 2000/2001, a large majority of Canadian children and youth were reported to have taken part in at least one organized extracurricular activity during the previous year. However, differences by socio-demographic and socio-economic characteristics were apparent. The likelihood of involvement in extracurricular activities was associated with age, family structure, family income, urban versus rural residence, and region. ■

## References

- Cooper H, Valentine JC, Nye B, Lindsay JJ. Relationships between five after-school activities and academic achievement. *Journal of Educational Psychology* 1999; 91: 369-78.
- Mahoney JL, Cairns RB. Do extracurricular activities protect against early school dropout? *Developmental Psychology* 1997; 32: 241-53.
- Offord DR, Lipman EL, Duku EK. *Sports, the Arts, and Community Programs: Rates and Correlates of Participation*. Ottawa, Ontario: Human Resources and Social Development Canada, 1998.
- Zaff JS, Moore KA, Papillo AR, Williams S. Implications of extracurricular activity participation during adolescence on positive outcomes. *Journal of Adolescent Research* 2003; 18: 599-630.
- Eccles JS, Barber B. Student council, volunteering, basketball, or marching band: What kinds of extracurricular involvement matters? *Journal of Adolescent Research* 1999; 14: 10-43.
- Harrison PA, Narayan G. Differences in behavior, psychological factors, and environmental factors associated with participation in school sports and other activities in adolescence. *The Journal of School Health* 2003; 73: 113-9.
- Statistics Canada, Human Resources Development Canada. *National Longitudinal Survey of Children and Youth, Cycle 4, Survey Instruments 2000-01: Book 1 - Parent, Child, and Youth*. Ottawa, Ontario: Statistics Canada, 2001.
- Statistics Canada. *Low Income Cutoffs from 1994 - 2003 and Low Income Measures from 1992 - 2001*. Ottawa, Ontario: Minister of Industry, 2004.
- Rao JNK, Wu CFJ, Yue K. Some recent work on resampling methods for complex surveys. *Survey Methodology* (Statistics Canada, Catalogue 12-000) 1992; 18(2): 209-17.
- Rust KF, Rao JNK. Variance estimation for complex surveys using replication techniques. *Statistical Methods in Medical Research* 1996; 5: 281-310.
- Yeo D, Mantel H, Liu TP. Bootstrap variance estimation for the National Population Health Survey. Baltimore: American Statistical Association, 1999.

## Appendix

### National Longitudinal Survey of Children and Youth (2000/2001) questions about extracurricular activities

#### Sports

##### Ages 6 to 9

- In the last 12 months, out of school hours, how often has your child: taken part in sports with a coach or instructor (except dance or gymnastics)?
- In the last 12 months, outside of school hours, how often has your child: taken lessons or instruction in other organized physical activities with a coach or instructor such as dance, gymnastics or martial arts?

##### Ages 10 to 13

- During the past 12 months, how often have you played sports WITH a coach or instructor (swimming lessons, baseball, hockey, etc.)?
- During the past 12 months, how often have you taken part in dance, gymnastics, karate or other groups or lessons, other than in gym class?

##### Ages 14 to 15

- In the last 3 months, how often have you taken part in the following school-based activities (other than in class): Played sports WITH a coach or an instructor other than for gym class (e.g., school teams)?
- In the last 3 months, how often have you taken part in the following school-based activities (other than in class): Taken part in dance, gymnastics, karate or other groups or lessons, other than in gym class?
- Out of school, during the past 12 months, how often have you played sports WITH a coach or instructor (swimming lessons, baseball, hockey, etc.)?
- Outside of school, during the past 12 months, how often have you taken part in dance, gymnastics, karate or other groups or lessons (always organized outside of school)?

##### Ages 16 to 17

- In the last 3 months, how often have you taken part in the following activities in school (other than in class): Played sports WITH a coach or an instructor, other than in gym class (e.g., school teams)?
- In the last 3 months, how often have you taken part in the following activities in school (other than in class): Taken part in dance, gymnastics, karate or other groups or lessons other than in gym class?
- Out of school, in the last 12 months, how often have you: Played sports or done physical activities with a coach or instructor (e.g. swimming lessons, baseball, hockey, aerobics, etc.)?
- Outside of school, in the last 12 months, how often have you: Taken part in dance, gymnastics, karate or other groups or lessons (outside of school)?

#### Non-sport activities

##### Ages 6 to 9

- In the last 12 months, out of school hours, how often has your child: taken lessons or instruction in music, art or other non-sport activities?

##### Ages 10 to 13

- During the past 12 months, how often have you taken part in art, drama or music groups, clubs or lessons outside of class?

##### Ages 14 to 15

- In the last 3 months, how often have you taken part in the following school-based activities (other than in class): Taken part in art, drama or music groups, clubs or lessons, outside of class?
- Out of school, during the past 12 months, how often have you taken part in art, drama or music groups, clubs or lessons (again out of school)?

##### Ages 16 to 17

- In the last 3 months, how often have you taken part in the following activities in school (other than in class): Taken part in art, drama or music groups, clubs or lessons outside of class?
- Out of school, in the last 12 months, how often have you: Taken part in art, drama or music groups, clubs or lessons (out of school)?

#### Clubs or community groups

##### Ages 6 to 9

- In the last 12 months, out of school hours, how often has your child: taken part in any clubs, groups or community programs with leadership, such as Brownies, Cubs or church groups?

##### Ages 10 to 13

- In the last 12 months, how often have you taken part in clubs or groups such as Guides or Scouts, 4-H club, community, church or other religious groups?

##### Ages 14 to 15

- In the last 3 months, how often have you taken part in the following school-based activities (other than in class): Taken part in a school club or group such as yearbook club, photography club or student council?
- Out of school, during the past 12 months, how often have you taken part in clubs or groups such as Guides or Scouts, 4-H club, community, church or other religious groups?

##### Ages 16 to 17

- In the last 3 months, how often have you taken part in the following activities in school (other than in class): Taken part in a school club or group such as student council, yearbook club or photography club?
- Out of school, in the last 12 months, how often have you: Taken part in clubs or groups such as Guides or Scouts, Junior Farmers, community, political, church or other religious groups?