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Community belonging and self-perceived health

by Margot Shields

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Over the past 25 years, research has established a causal association between social relationships and health.^{1,2} People who are socially isolated and have few ties to other individuals are more likely to suffer from poor physical and mental health and to die prematurely.

The notion of “social capital” has received increasing attention in health research. Social capital is generally defined as aspects of social organization, such as civic participation and trust in others, that facilitate cooperation among community members.³ High levels of social capital have been linked to lower mortality rates, lower rates of crime, and positive perceptions of health.³⁻⁷

There is, however, some debate about whether social capital benefits the community at large or individual residents, who profit directly from feelings of connectedness to the community. A recent study suggests that the association between social capital and positive perceptions of health is important at the individual level.⁷ It is hypothesized that feeling “connected” to one’s community promotes health because such ties promote mutual respect, and thereby increase self-esteem. Another possibility is that interaction among community members results in the transmission of social norms related to health-promoting behaviours such as physical activity and refraining from smoking.^{1,2}

Since its inception in 2000/2001, the Canadian Community Health Survey (CCHS) has included a question on community belonging. An earlier paper, based on data from the 2000/2001 CCHS, revealed an association between individuals’ sense of belonging and their general self-perceived health.⁸ With data from the 2005 CCHS, this article updates that earlier work.

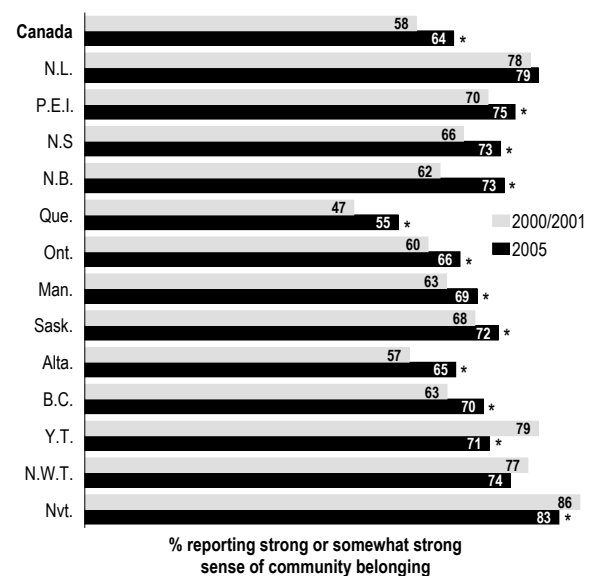
Comparisons are made between rates of community belonging at the provincial or territorial and health region levels. Because the 2005 CCHS

contains questions about self-perceived mental health, the previous analysis can be extended by measuring associations between community belonging and mental as well as general health.

Majority feel connected

In 2005, close to two-thirds of Canadians (64%) reported a strong sense of community belonging; this included 17% who described their sense of belonging as very strong, and 47% who reported it as “somewhat strong.” Just over a quarter (26%) reported a “somewhat weak” sense of community belonging; and 10%, “very weak.”

Figure 1
Percentage reporting strong or somewhat strong sense of community belonging, by province or territory, household population aged 12 or older, Canada, 2000/2001 and 2005



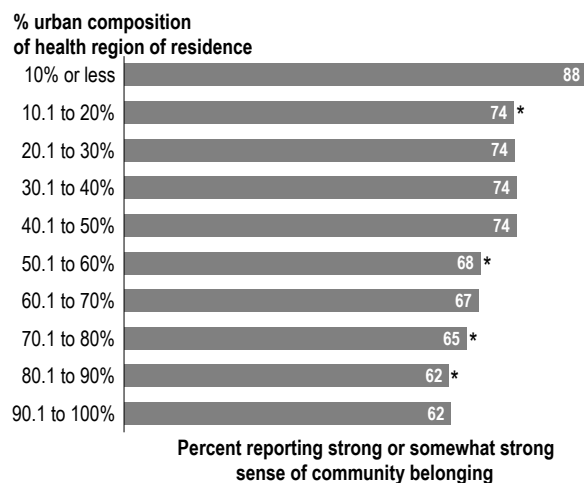
* significantly different from estimate for 2000/2001 ($p < 0.05$)

Sources: 2000/2001 and 2005 Canadian Community Health Survey.

Higher in Atlantic provinces and the territories

The likelihood of reporting a strong sense of community belonging varied across the country (Figure 1, Appendix Table A). Approximately three-quarters of the residents of the Atlantic provinces reported a strong sense of belonging, with Newfoundlanders having the highest rate among the ten provinces at 79%. Rates were also high for residents of the territories: 71% for Yukon Territory, 74% for the Northwest Territories, and 83% for Nunavut. Residents of Quebec were the least likely to feel connected, with only 55% reporting a strong sense of belonging. A previous study found that Quebecers were less likely to report a strong sense of belonging to Canada, but their sense of belonging to their province was similar to that of other Canadians.⁹

Figure 2
Percentage reporting strong or somewhat strong sense of community belonging, by percent urban composition of health region of residence, household population aged 12 or older, Canada, 2005



* significantly lower than previous estimate ($p < 0.05$)

Source: 2005 Canadian Community Health Survey.

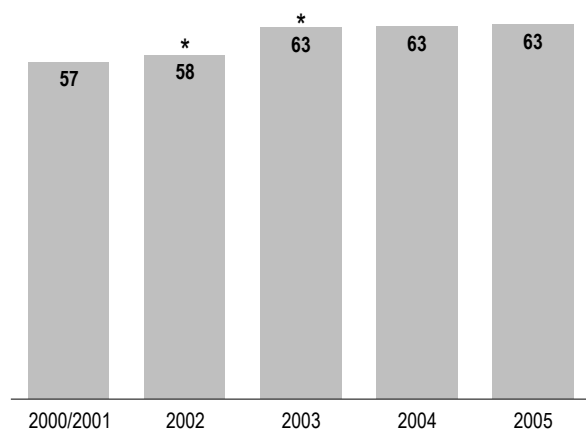
The degree to which the residents of health regions within each province felt connected to their respective communities also differed widely. Health regions made up of major urban centres tended to have the lowest rates of community belonging. For people living in predominately urban health regions (80% to 100% urban), the overall community belonging rate was 62%. In Ontario, the lowest rates were for the health regions of the City of Toronto, York, and the City of Ottawa; in Manitoba, the lowest rate was for Winnipeg; in Saskatchewan, Saskatoon; in Alberta, Calgary and the Capital health region (Edmonton); and in British Columbia, Vancouver. Conversely, rural health regions had higher rates of belonging. The figure for residents of health regions that were predominantly rural (10% or less urban) was 88% (Figure 2). The highest rate in the country was 90% in the Labrador-Grenfell health region in Newfoundland and Labrador.

Rates increasing

The question on community belonging has been included in every CCHS cycle since 2000/2001. Because some cycles included only the population aged 15 or older and some excluded the territories, trends in rates were compared for the population aged 15 or older living in the ten provinces (Figure 3). From 2000/2001 to 2002, the proportion of the population reporting a strong sense of community belonging rose slightly from 57% to 58%. By 2003, the rate had risen 5 percentage points to 63% and has remained stable since then.

Between 2000/2001 and 2005, significant increases in community belonging occurred in all provinces except Newfoundland and Labrador (Figure 1). The sharpest upturn was in New Brunswick, where the rate rose from 62% to 73%. Conversely, in the territories, rates decreased in Nunavut and Yukon Territory, and no significant change was observed for the Northwest Territories.

Figure 3
Percentage reporting strong or somewhat strong sense of community belonging, household population aged 15 or older, Canada excluding territories, 2000/2001 to 2005



* significantly different from estimate for previous period ($p < 0.05$)
Sources: 2000/2001 to 2005 Canadian Community Health Survey.

Home language and cultural group

Community belonging was related to home language (Table 1). Among people who spoke mostly English at home, 68% reported a strong sense of community belonging. The figure was considerably lower (55%) among those whose home language was French. For those who spoke some other language at home, 60% reported a strong sense of belonging.

This low rate of community belonging at the national level for people whose home language was French reflects the situation in Quebec. In Quebec, a strong sense of belonging was reported by 61% of those whose home language was English, compared with 54% of those whose home language was French (data not shown). By contrast, in the other provinces and territories, the likelihood of reporting a strong sense of belonging was similar regardless of whether the home language was English or French (68% and 67%, respectively).

Associations between community connectedness and cultural or racial group were also observed.

Table 1

Percentage reporting strong or somewhat strong sense of community belonging, by selected characteristics, household population aged 12 or older, Canada, 2005

	%	95% confidence interval
Total	64.4	64.0 to 64.8
Sex		
Men	64.0	63.4 to 64.6
Women†	64.7	64.2 to 65.3
Age group		
12 to 17	77.4*	76.3 to 78.4
18 to 29	54.5*	53.5 to 55.5
30 to 44†	62.1	61.2 to 62.9
45 to 64	65.4*	64.7 to 66.2
65 or older	71.6*	70.8 to 72.5
Marital status‡		
Married or common-law†	64.9	64.2 to 65.5
Widowed	63.2	59.3 to 67.1
Divorced or separated	57.3*	55.7 to 59.0
Never married	54.4*	53.1 to 55.7
Children younger than 12 in household		
Yes	66.8*	66.0 to 67.6
No†	63.6	63.1 to 64.1
Education‡		
Less than secondary graduation	61.1	59.6 to 62.6
Secondary graduation	64.6*	63.3 to 65.9
Some postsecondary	63.2	61.3 to 65.1
Postsecondary graduation†	62.2	61.6 to 62.8
Household income quintile		
1 Lowest	60.8*	59.8 to 61.8
2	64.4	63.4 to 65.4
3†	64.7	63.6 to 65.7
4	65.2	64.3 to 66.2
5 Highest	65.0	64.1 to 66.0
Home ownership		
Yes	67.1*	66.6 to 67.6
No†	55.1	54.3 to 56.0
Language spoken most often at home		
English†	68.1	67.6 to 68.5
French	55.0*	54.0 to 55.9
Other	60.1*	58.3 to 61.8
Cultural or racial group		
White†	64.8	64.4 to 65.3
South Asian	74.2*	71.3 to 77.1
Filipino	68.9	63.9 to 73.9
Aboriginal (off-reserve)	63.7	61.5 to 65.9
Black	63.7	59.9 to 67.5
Arab	62.3	56.0 to 68.6
Japanese	58.7	48.4 to 69.0
West Asian	57.1	48.3 to 65.9
Latin American	54.3*	48.4 to 60.1
Southeast Asian	51.9*	45.8 to 57.9
Chinese	51.8*	48.6 to 55.0
Korean	50.0*	39.8 to 60.3
Other or multiple racial or cultural origin	62.2	58.8 to 65.5

† reference category

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

‡ based on people aged 25 to 64

Source: 2005 Canadian Community Health Survey.

The data

Estimates are based on data from the 2005 Canadian Community Health Survey (CCHS), cycle 3.1. The CCHS covers the household population aged 12 or older in all provinces and territories, except members of the regular Forces and residents of institutions, Indian reserves, Canadian Forces bases, and some remote areas. Data for cycle 3.1 were collected from January to December 2005 from a sample of 132,947 persons. The response rate was 79%. Approximately 3% of this sample were excluded from this analysis because of non-response to the question on community belonging. All estimates were weighted to be representative of the household population aged 12 or older in 2005. Differences between estimates were tested to ensure statistical significance, which was established at the 0.05 level. To account for survey design effects, standard errors and coefficients of variation were estimated using the bootstrap technique.¹⁶⁻¹⁸

To measure *sense of community belonging*, respondents to the CCHS were asked, "How would you describe your sense of belonging to your local community? Would you say it is: very strong? somewhat strong? somewhat weak? very weak?"

Self-perceived general health was assessed with the question, "In general, would you say your health is: excellent? very good? good? fair? poor?"

Self-perceived mental health was measured with the question, "In general, would you say your mental health is: excellent? very good? good? fair? poor?"

Household income was based on the number of people in the household and total household income from all sources in the 12 months before the interview. Household income groups were derived by calculating the ratio between the total household income from all sources in the previous 12 months and Statistics Canada's low-income cutoff (LICO) specific to the number of people in the household, the size of the community and the survey year. These adjusted income ratios were grouped into quintiles (five groupings, each containing one-fifth of Canadians).

Home ownership was established by asking respondents if the dwelling in which they lived was owned by a member of the household.

An *urban/rural* variable was assigned to each record based on the percent urban composition of the health region where the respondent lived. Urban areas were defined as continuously built-up areas having a population concentration of 1,000 or more and a population density of 400 or more per square kilometre based on current census population counts. The percent urban composition was calculated for each health region by dividing the population living in these urban areas by the total population of the health region.

Home language was established by asking respondents, "What language do you speak most often at home?"

To establish *cultural or racial group*, respondents were asked, "People living in Canada come from many different cultural and racial backgrounds. Are you:" A check-list of responses was read to respondents.

Among Whites, 65% reported a strong sense of community belonging. The figure was higher for South Asians (74%), and lower for Koreans (50%), Chinese (52%), Southeast Asians (52%) and Latin Americans (54%).

Age, marital status, socio-economic characteristics

While the proportions of men and women who reported a strong sense of community belonging did not differ, rates did vary by age group. More than three-quarters (77%) of youth aged 12 to 17 reported a strong sense of belonging, but among young adults aged 18 to 29, the figure was much lower at 55%. At older ages, the rate increased steadily from 62% among those aged 30 to 44 to 72% among seniors (65 or older).

Feeling connected to the community was less common among people who were divorced or separated (57%) or never married (54%) than among those who were married or living common-law (65%). People living with young children were slightly more likely than those who did not have young children in their household to have a strong sense of belonging.

Modest associations were observed between community belonging and socio-economic status. People in the lowest household group were less likely to report a strong sense of community belonging, compared with those in the middle-income group, but there were no differences for the remaining income groups. The only association with education was that postsecondary graduates were slightly less likely to feel connected than were people who had completed only high school.

Home ownership, however, did make a difference, with 67% of owners reporting a strong sense of community belonging, compared with 55% of those who were not owners.

Relationships persist

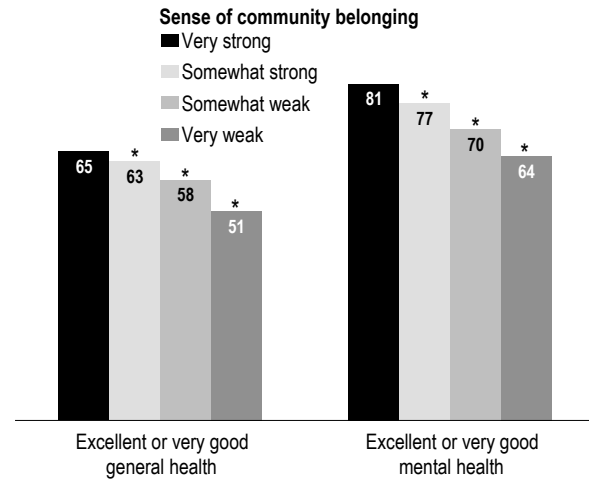
When examined in a multivariate model, these associations between community belonging and cultural and socio-demographic characteristics

generally persisted (Appendix Table B). Because rates of community belonging differed by age group and the age structure of the population has shifted slightly since 2000, rates over time were recalculated to standardize to the 2005 population. The crude and age-standardized rates were virtually identical (data not shown), indicating that the increases over time were not due to changes in the age distribution of the population. As well, to ensure that geographical differences were not the result of differing age distributions, provincial and health region rates were age-standardized to the overall 2005 Canadian population. Again, the crude and adjusted rates were similar; the results of significance testing between provincial and health region rates versus the overall Canadian rate (Appendix Table B) remained virtually unchanged when based on adjusted rates.

Community belonging and health

Close to two-thirds of those who felt a very strong or somewhat strong sense of community belonging reported excellent or very good general health (Figure 4). By contrast, about half (51%) of those with a very weak sense of belonging viewed their general health favourably. These findings are particularly relevant in view of evidence that self-

Figure 4
Percentage reporting excellent or very good health, by sense of community belonging, household population aged 12 or older, Canada, 2005



* significantly lower than previous category (p < 0.05)
Source: 2005 Canadian Community Health Survey.

perceived general health is predictive of chronic disease incidence, use of medical services, recovery from illness, functional decline, and mortality.¹⁰⁻¹⁵

The likelihood of reporting excellent or very good mental health also paralleled decreases in connectedness—from 81% among those with a very

Table 2

Adjusted odds ratios relating community belonging to excellent or very good self-perceived general and mental health, household population aged 12 or older, Canada, 2005

Sense of community belonging	Model 1 Excellent or very good self-perceived general health		Model 2 Excellent or very good self-perceived general health controlling for mental health		Model 3 Excellent or very good self-perceived mental health	
	Adjusted odds ratio†	95% confidence interval	Adjusted odds ratio†	95% confidence interval	Adjusted odds ratio†	95% confidence interval
Very strong	1.8*	1.7 to 1.9	1.5*	1.4 to 1.7	2.2*	2.0 to 2.3
Somewhat strong	1.4*	1.3 to 1.5	1.2*	1.2 to 1.3	1.5*	1.4 to 1.6
Somewhat weak	1.1*	1.0 to 1.2	1.1	1.0 to 1.1	1.1*	1.0 to 1.2
Very weak†	1.0	...	1.0	...	1.0	...

† reference category

‡ controlled for sex, age, marital status, presence of children in household, education, household income, home ownership, language spoken most often at home, cultural or racial group, percent urban composition in health region of residence, province or territory, employment status, smoking status, number of physical chronic conditions, and mood or anxiety disorder in past year

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

... not applicable

Source: 2005 Canadian Community Health Survey.

strong sense of community belonging down to 64% among those whose sense of community belonging was very weak (Figure 4).

Even when other potentially confounding factors were taken into account, community belonging was strongly related to self-perceived general and mental health (Table 2). Compared with people whose sense of community belonging was weak, those with a very strong sense had close to twice the odds of reporting excellent or very good general health (Model 1), and over twice the odds of reporting excellent or very good mental health (Model 3)

When people rate their general health, psychological factors play a role in perceptions.¹⁹ Therefore, the degree to which physical and mental factors contribute to associations between community belonging and perceptions of general

health is unknown. When the relationship between community belonging and self-perceived general health was examined in a model controlling for self-perceived mental health in addition to other possible confounders, the odds ratios for community belonging diminished but were still significant (Model 2). This suggests that a sense of community belonging is associated with both physical and mental health. However, because of the cross-sectional nature of this analysis, it is not possible to determine if health exerts an influence on sense of community belonging or the other way around.

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References

- Berkman LF, Glass T, Brissette I, et al. From social integration to health: Durkheim in the new millennium. *Social Science and Medicine* 2000; 51(6): 843-57.
- House JS, Landis KR, Umberson D. Social relationships and health. *Science* 1988; 241(4865): 540-5.
- Kawachi I, Kennedy BP, Glass R. Social capital and self-rated health: a contextual analysis. *American Journal of Public Health* 1999; 89(8): 1187-93.
- Kawachi I, Colditz GA, Ascherio A, et al. A prospective study of social networks in relation to total mortality and cardiovascular disease in men in the USA. *Journal of Epidemiology and Community Health* 1996; 50(3): 245-51.
- Kawachi I, Kennedy BP, Lochner K, et al. Social capital, income inequality, and mortality. *American Journal of Public Health* 1997; 87(9): 1491-8.
- Kennedy BP, Kawachi I, Prothrow-Stith D, et al. Social capital, income inequality, and firearm violent crime. *Social Science and Medicine* 1998; 47(1): 7-17.
- Poortinga W. Social capital: An individual or collective resource for health? *Social Science and Medicine* 2005.
- Ross N. Community belonging and health. *Health Reports* (Statistics Canada, Catalogue Statistics Canada, Catalogue 82-003) 2002; 13(3): 33-9.
- Schellenberg G. *2003 General Social Survey on Social Engagement, cycle 17: an overview of findings*. (Statistics Canada, Catalogue 89-598-XIE). Ottawa: Minister of Industry, 2004.
- Evashwick C, Rowe G, Diehr P, et al. Factors explaining the use of health care services by the elderly. *Health Services Research* 1984; 19(3): 357-82.
- Ferraro KF, Farmer MM, Wybraniec JA. Health trajectories: long-term dynamics among black and white adults. *Journal of Health and Social Behavior* 1997; 38(1): 38-54.
- Idler EL, Benyamini Y. Self-rated health and mortality: a review of twenty-seven community studies. *Journal of Health and Social Behavior* 1997; 38(1): 21-37.
- Idler EL, Russell LB, Davis D. Survival, functional limitations, and self-rated health in the NHANES I Epidemiologic Follow-up Study, 1992. First National Health and Nutrition Examination Survey. *American Journal of Epidemiology* 2000; 152(9): 874-83.
- Kaplan GA, Goldberg DE, Everson SA, et al. Perceived health status and morbidity and mortality: evidence from the Kuopio ischaemic heart disease risk factor study. *International Journal of Epidemiology* 1996; 25(2): 259-65.
- Wilcox VL, Kasl SV, Idler EL. Self-rated health and physical disability in elderly survivors of a major medical event. *Journal of Gerontology: Social Sciences* 1996; 51(2): S96-104.
- Rao JNK, Wu CFJ, Yue K. Some recent work on resampling methods for complex surveys. *Survey Methodology* (Statistics Canada, Catalogue 12-001) 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. *Proceedings of the Annual Meeting of the American Statistical Association, Survey Research Methods Section, August 1999*. Baltimore: American Statistical Association, 1999.
- Shields M, Shooshtari S. Determinants of self-perceived health. *Health Reports* (Statistics Canada, Catalogue 82-003) 2001; 13(1): 35-52.

Table A

Percentage reporting strong or somewhat strong sense of community belonging, by province or territory and health region, household population aged 12 or older, Canada, 2005

	Region code	%	95% confidence interval	Significantly higher or lower (p < 0.05) than:	
				Canada	Province or Territory
Canada		64.4	64.0 to 64.8
Newfoundland and Labrador	1000	79.2	77.5 to 80.9	Higher	...
Eastern Regional Integrated Health Authority	1011	74.7	72.2 to 77.3	Higher	Lower
Central Regional Integrated Health Authority	1012	86.8	83.4 to 90.1	Higher	Higher
Western Regional Integrated Health Authority	1013	81.5	77.6 to 85.4	Higher	Same
Labrador-Grenfell Regional Integrated Health Authority	1014	90.3	87.7 to 92.8	Higher	Higher
Prince Edward Island	1100	75.1	72.4 to 77.8	Higher	...
West Prince	1101	87.6	82.3 to 93.0	Higher	Higher
East Prince	1102	80.5	76.5 to 84.4	Higher	Higher
Queens	1103	68.9	64.0 to 73.7	Same	Lower
Kings	1104	78.4	72.7 to 84.1	Higher	Same
Nova Scotia	1200	72.6	70.9 to 74.2	Higher	...
Zone 1	1201	74.8	71.2 to 78.5	Higher	Same
Zone 2	1202	68.7	63.4 to 74.0	Same	Same
Zone 3	1203	72.3	67.8 to 76.8	Higher	Same
Zone 4	1204	78.9	74.7 to 83.1	Higher	Higher
Zone 5	1205	80.0	76.6 to 83.4	Higher	Higher
Zone 6	1206	68.8	65.6 to 72.0	Higher	Lower
New Brunswick	1300	73.2	71.6 to 74.8	Higher	...
Region 1	1301	74.9	71.6 to 78.1	Higher	Same
Region 2	1302	75.7	72.4 to 78.9	Higher	Same
Region 3	1303	70.2	66.5 to 73.9	Higher	Same
Region 4	1304	67.9	61.8 to 73.9	Same	Same
Region 5	1305	79.4	75.0 to 83.8	Higher	Higher
Region 6	1306	67.1	61.4 to 72.8	Same	Lower
Region 7	1307	81.0	75.2 to 86.7	Higher	Higher
Quebec	2400	54.7	53.8 to 55.6	Lower	...
Région du Bas-Saint-Laurent	2401	66.6	64.0 to 69.1	Same	Higher
Région du Saguenay - Lac-Saint-Jean	2402	60.4	56.4 to 64.4	Same	Higher
Région de la Capitale Nationale	2403	53.1	49.6 to 56.5	Lower	Same
Région de la Mauricie et du Centre-du-Québec	2404	56.0	52.3 to 59.7	Lower	Same
Région de l'Estrie	2405	56.9	53.3 to 60.6	Lower	Same
Région de Montréal	2406	55.2	53.3 to 57.0	Lower	Same
Région de l'Outaouais	2407	52.8	49.1 to 56.5	Lower	Same
Région de l'Abitibi-Témiscamingue	2408	56.2	52.2 to 60.1	Lower	Same
Région de la Côte-Nord	2409	74.0	70.7 to 77.2	Higher	Higher
Région du Nord-du-Québec	2410	74.3	69.9 to 78.7	Higher	Higher
Région de la Gaspésie - Îles-de-la-Madeleine	2411	71.8	67.9 to 75.8	Higher	Higher
Région de la Chaudière-Appalaches	2412	53.7	50.1 to 57.4	Lower	Same
Région de Laval	2413	45.2	42.6 to 47.7	Lower	Lower
Région de Lanaudière	2414	49.4	44.9 to 54.0	Lower	Lower
Région des Laurentides	2415	54.1	50.8 to 57.4	Lower	Same
Région de la Montérégie	2416	53.6	50.9 to 56.4	Lower	Same
Ontario	3500	65.5	64.7 to 66.3	Higher	...
District of Algoma Health Unit	3526	74.0	70.1 to 78.0	Higher	Higher
Brant County Health Unit	3527	70.6	66.8 to 74.4	Higher	Higher
Durham Regional Health Unit	3530	63.0	59.7 to 66.3	Same	Same
Elgin-St Thomas Health Unit	3531	69.4	65.2 to 73.7	Higher	Same
Grey Bruce Health Unit	3533	74.4	70.8 to 78.1	Higher	Higher
Haldimand-Norfolk Health Unit	3534	66.0	61.4 to 70.6	Same	Same
Haliburton, Kawartha, Pine Ridge District Health Unit	3535	72.2	68.4 to 76.0	Higher	Higher
Halton Regional Health Unit	3536	69.5	66.4 to 72.7	Higher	Higher
City of Hamilton Health Unit	3537	67.6	64.7 to 70.6	Higher	Same
Hastings and Prince Edward Counties Health Unit	3538	78.2	74.5 to 81.9	Higher	Higher

Table A

Percentage reporting strong or somewhat strong sense of community belonging, by province or territory and health region, household population aged 12 or older, Canada, 2005 continued

	Region code	%	95% confidence interval	Significantly higher or lower (p < 0.05) than:	
				Canada	Province or Territory
Huron County Health Unit	3539	73.6	68.7 to 78.5	Higher	Higher
Chatham-Kent Health Unit	3540	71.5	68.1 to 75.0	Higher	Higher
Kingston, Frontenac and Lennox and Addington Health Unit	3541	69.5	65.6 to 73.5	Higher	Higher
Lambton Health Unit	3542	77.1	73.7 to 80.4	Higher	Higher
Leeds, Grenville and Lanark District Health Unit	3543	69.6	66.0 to 73.3	Higher	Higher
Middlesex-London Health Unit	3544	67.8	64.4 to 71.2	Higher	Same
Niagara Regional Area Health Unit	3546	70.9	67.7 to 74.0	Higher	Higher
North Bay Parry Sound District Health Unit	3547	71.6	67.4 to 75.8	Higher	Higher
Northwestern Health Unit	3549	73.0	68.2 to 77.8	Higher	Higher
City of Ottawa Health Unit	3551	62.2	59.6 to 64.8	Same	Lower
Oxford County Health Unit	3552	70.5	65.8 to 75.1	Higher	Higher
Peel Regional Health Unit	3553	67.8	65.5 to 70.2	Higher	Higher
Perth District Health Unit	3554	74.6	70.3 to 79.0	Higher	Higher
Peterborough County-City Health Unit	3555	75.5	71.5 to 79.4	Higher	Higher
Porcupine Health Unit	3556	74.4	70.3 to 78.6	Higher	Higher
Renfrew County and District Health Unit	3557	72.5	67.2 to 77.8	Higher	Higher
Eastern Ontario Health Unit	3558	62.5	58.2 to 66.7	Same	Same
Simcoe Muskoka District Health Unit	3560	65.1	62.0 to 68.3	Same	Same
Sudbury and District Health Unit	3561	70.8	67.4 to 74.1	Higher	Higher
Thunder Bay District Health Unit	3562	74.3	71.0 to 77.6	Higher	Higher
Timiskaming Health Unit	3563	72.8	67.8 to 77.8	Higher	Higher
Waterloo Health Unit	3565	65.8	62.8 to 68.8	Same	Same
Wellington-Dufferin-Guelph Health Unit	3566	64.1	60.6 to 67.6	Same	Same
Windsor-Essex County Health Unit	3568	67.6	64.7 to 70.5	Higher	Same
York Regional Health Unit	3570	60.9	58.1 to 63.8	Lower	Lower
City of Toronto Health Unit	3595	58.2	55.8 to 60.7	Lower	Lower
Manitoba	4600	68.5	66.7 to 70.3	Higher	...
Winnipeg Regional Health Authority	4610	64.6	61.9 to 67.4	Same	Lower
Brandon Regional Health Authority	4615	67.4	61.9 to 72.9	Same	Same
North Eastman Regional Health Authority	4620	70.5	65.0 to 76.1	Higher	Same
South Eastman Regional Health Authority	4625	66.2	61.3 to 71.0	Same	Same
Interlake Regional Health Authority	4630	74.2	69.1 to 79.2	Higher	Higher
Central Regional Health Authority	4640	76.4	72.8 to 80.0	Higher	Higher
Assiniboine Regional Health Authority	4645	82.0	78.2 to 85.8	Higher	Higher
Parkland Regional Health Authority	4660	81.4	76.2 to 86.5	Higher	Higher
Norman Regional Health Authority	4670	74.5	69.6 to 79.4	Higher	Higher
Burntwood/Churchill	4685	72.4	67.2 to 77.6	Higher	Same
Saskatchewan	4700	72.2	70.7 to 73.7	Higher	...
Sun Country Regional Health Authority	4701	80.5	75.5 to 85.6	Higher	Higher
Five Hills Regional Health Authority	4702	71.0	66.0 to 76.0	Higher	Same
Cypress Regional Health Authority	4703	84.0	80.3 to 87.8	Higher	Higher
Regina Qu'Appelle Regional Health Authority	4704	71.7	68.5 to 75.0	Higher	Same
Sunrise Regional Health Authority	4705	67.9	61.3 to 74.5	Same	Same
Saskatoon Regional Health Authority	4706	66.0	62.7 to 69.2	Same	Lower
Heartland Regional Health Authority	4707	79.3	75.2 to 83.3	Higher	Higher
Kelsey Trail Regional Health Authority	4708	79.2	74.8 to 83.7	Higher	Higher
Prince Albert Parkland Regional Health Authority	4709	75.9	71.1 to 80.6	Higher	Same
Prairie North Regional Health Authority	4710	79.2	74.6 to 83.8	Higher	Higher
Mamawetan/Keewatin/Athabasca	4714	75.0	70.4 to 79.7	Higher	Same
Alberta	4800	64.8	63.4 to 66.1	Same	...
Chinook Regional Health Authority	4820	76.8	72.9 to 80.7	Higher	Higher
Palliser Health Region	4821	70.5	66.9 to 74.1	Higher	Higher
Calgary Health Region	4822	60.9	58.5 to 63.3	Lower	Lower
David Thompson Regional Health Authority	4823	71.1	68.2 to 74.0	Higher	Higher
East Central Health	4824	75.1	71.6 to 78.7	Higher	Higher
Capital Health	4825	62.3	59.7 to 64.9	Same	Lower
Aspen Regional Health Authority	4826	68.9	64.9 to 73.0	Higher	Higher

Table A

Percentage reporting strong or somewhat strong sense of community belonging, by province or territory and health region, household population aged 12 or older, Canada, 2005 *continued*

	Region code	%	95% confidence interval	Significantly higher or lower (p < 0.05) than:	
				Canada	Province or Territory
Peace Country Health	4827	71.5	67.3 to 75.7	Higher	Higher
Northern Lights Health Region	4828	69.3	64.1 to 74.6	Same	Same
British Columbia	5900	69.6	68.6 to 70.6	Higher	...
East Kootenay Health Service Delivery Area	5911	69.1	64.1 to 74.1	Same	Same
Kootenay-Boundary Health Service Delivery Area	5912	77.2	72.4 to 81.9	Higher	Higher
Okanagan Health Service Delivery Area	5913	71.0	67.2 to 74.7	Higher	Same
Thompson/Cariboo Health Service Delivery Area	5914	76.3	72.4 to 80.3	Higher	Higher
Fraser East Health Service Delivery Area	5921	70.0	66.4 to 73.7	Higher	Same
Fraser North Health Service Delivery Area	5922	66.6	63.8 to 69.3	Same	Lower
Fraser South Health Service Delivery Area	5923	68.4	65.4 to 71.4	Higher	Same
Richmond Health Service Delivery Area	5931	66.9	62.1 to 71.7	Same	Same
Vancouver Health Service Delivery Area	5932	65.5	62.5 to 68.6	Same	Lower
North Shore/Coast Garibaldi Health Service Delivery Area	5933	71.7	68.1 to 75.4	Higher	Same
South Vancouver Island Health Service Delivery Area	5941	72.6	69.8 to 75.4	Higher	Higher
Central Vancouver Island Health Service Delivery Area	5942	71.8	68.3 to 75.4	Higher	Same
North Vancouver Island Health Service Delivery Area	5943	71.5	65.3 to 77.8	Higher	Same
Northwest Health Service Delivery Area	5951	80.9	76.6 to 85.1	Higher	Higher
Northern Interior Health Service Delivery Area	5952	68.3	63.5 to 73.2	Same	Same
Northeast Health Service Delivery Area	5953	67.3	60.2 to 74.4	Same	Same
Yukon Territory	6001	70.6	66.7 to 74.6	Higher	...
Northwest Territories	6101	74.3	69.3 to 79.3	Higher	...
Nunavut	6201	82.8	79.6 to 85.9	Higher	...

... not applicable

Source: 2005 Canadian Community Health Survey.

Table B

Adjusted odds of reporting strong or somewhat strong sense of community belonging, by selected characteristics, household population aged 12 or older, Canada, 2005

	Adjusted odds ratio	95% confidence interval		Adjusted odds ratio	95% confidence interval
Sex			Cultural or racial group		
Men	1.0	0.9 to 1.0	White†	1.0	...
Women†	1.0	...	South Asian	1.8*	1.5 to 2.1
Age group			Filipino	1.3*	1.0 to 1.6
12 to 17	2.3*	2.1 to 2.5	Aboriginal (off-reserve)	0.9*	0.8 to 1.0
18 to 29	0.8*	0.8 to 0.9	Black	1.2*	1.0 to 1.5
30 to 44†	1.0	...	Arab	1.3	0.9 to 1.7
45 to 64	1.2*	1.2 to 1.3	Japanese	0.6*	0.4 to 1.0
65 or older	1.7*	1.6 to 1.9	West Asian	0.9	0.6 to 1.4
Marital status			Latin American	0.9	0.7 to 1.1
Married or common-law†	1.0	...	Southeast Asian	0.7*	0.5 to 0.9
Widowed	1.0	0.9 to 1.1	Chinese	0.6*	0.5 to 0.7
Divorced or separated	0.8*	0.8 to 0.9	Korean	0.6*	0.4 to 0.9
Never married	0.9*	0.9 to 1.0	Other or multiple racial or cultural origin	1.0	0.8 to 1.2
Children younger than 12 in household			Percent urban composition of health region of residence		
Yes	1.2*	1.2 to 1.3	10% or less	2.4*	1.4 to 4.0
No†	1.0	...	10.1 to 20%	1.0	0.8 to 1.3
Education			20.1 to 30%	1.2*	1.1 to 1.4
Less than secondary graduation	1.0	0.9 to 1.0	30.1 to 40%	1.1	1.0 to 1.2
Secondary graduation	1.0	1.0 to 1.1	40.1 to 50%	1.1	1.0 to 1.2
Some postsecondary	1.0	1.0 to 1.1	50.1 to 60%†	1.0	...
Postsecondary graduation†	1.0	...	60.1 to 70%	0.9*	0.9 to 1.0
Household income quintile			70.1 to 80%	0.9*	0.8 to 0.9
1 Lowest	0.9*	0.9 to 1.0	80.1 to 90%	0.8*	0.8 to 0.9
2	1.0	0.9 to 1.1	90.1 to 100%	0.7*	0.7 to 0.8
3†	1.0	...	Province or territory		
4	1.1	1.0 to 1.1	Newfoundland and Labrador	1.6*	1.5 to 1.9
5 Highest	1.0	1.0 to 1.1	Prince Edward Island	1.2*	1.0 to 1.4
Home ownership			Nova Scotia	1.2*	1.1 to 1.3
Yes	1.4*	1.3 to 1.4	New Brunswick	1.3*	1.1 to 1.4
No†	1.0	...	Quebec	0.8*	0.8 to 0.9
Language spoken most often at home			Ontario†	1.0	...
English†	1.0	...	Manitoba	1.1	1.0 to 1.2
French	0.7*	0.7 to 0.8	Saskatchewan	1.2*	1.1 to 1.3
Other	0.9*	0.8 to 1.0	Alberta	1.0	0.9 to 1.0
			British Columbia	1.3*	1.2 to 1.4
			Yukon Territory	1.1	0.9 to 1.4
			Northwest Territories	1.4*	1.0 to 1.8
			Nunavut	2.5*	1.8 to 3.4

† reference category

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

... not applicable

Source: 2005 Canadian Community Health Survey.