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CANADIAN Social Trends

Features

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The following standard symbols are used in Statistics Canada publications:

.	not available for any reference period
..	not available for a specific reference period
…	not applicable
0	true zero or a value rounded to zero
0^s	value rounded to 0 (zero) where there is a meaningful distinction between true zero and the value that was rounded
^{p}	preliminary
^{r}	revised
x	suppressed to meet the confidentiality requirements of the *Statistics Act*
^{E}	use with caution
F	too unreliable to be published

Caring for a parent who lives far away: The consequences

by Mireille Vézina and Martin Turcotte

Family members are generally the main source of informal assistance when a relative has a chronic health problem. When those requiring care are elderly, if they have children who are available it is usually these children who come to their aid.[1] Seniors who require support but do not have a partner or whose partner can no longer provide care are potentially even more dependent on their children.

As the population ages, it is likely that an increasing number of adults will be called upon to assist and support a parent with diminishing independence or a chronic health problem. This trend appears to have already begun. For example, in 2007, the number of people aged 45 and over providing assistance and care to a chronically ill senior was 2.7 million, up 670,000 from five years earlier (in 2002). The increase was especially substantial for women, with the proportion of women aged 45 and over who informally provided care rising from 18% in 2002 to 22% in 2007. For men, the proportion remained unchanged (19%). In most cases (62%), the receiver of care was a parent or parent-in-law.[2]

Assisting one's ailing parents or parents-in-law is a self-evident responsibility for many people. However, different constraints on time and resources may make this an onerous responsibility. The majority of caregivers are employed—often full-time.[3] Also, even though their own children may be teenagers or young adults and therefore require less attention, it is increasingly common, as fertility extends to more advanced ages, for caregivers in their forties to still be responsible for young children.[4]

These occupational and family commitments can put pressure on caregivers. A Statistics Canada study has shown, for example, that some workers who provided care—especially high-intensity care—felt stressed and less satisfied with how they were balancing their work life and their home life. Those who provided such care while working long hours may have significant feelings of guilt.[5]

In addition to the constraints related to having a job and working long hours, many caregivers live some distance from the parent to whom they are providing care. It is possible that, for them, the costs of assisting an ailing parent, in both time and money, are even greater. But is this really the case, and if so, to what extent?

Little attention has been given to the question of how long-distance caregiving affects the caregiver's social and economic life. In a context where individuals and families are increasingly geographically dispersed, a number of questions are of interest. What proportion of caregivers live an hour or more by car from the parent to whom they are providing care? What socioeconomic differences are there between caregivers who live farther from their parent and those who live closer? Do the types of support provided vary based on the distance between the caregiver and the assisted parent? And finally, does living further away have negative effects on caregivers in financial, occupational, social and family terms? The main objective of this study is to answer these questions.

The first section of this study provides a statistical profile of caregivers who live far from their parents and compares them with caregivers who live close by. The second section looks at the different financial, social and work schedule impacts that are associated with living relatively far from the care recipient.

This study focuses on individuals aged 45 and over whose parent or parent-in-law is the primary receiver of care, that is, the person to whom they have devoted the most time and resources in the past twelve months because of a long-term health problem or physical limitation. The term 'care receiver' or 'care recipient' will be used to designate these persons. Data for the study are drawn from the 2007 General Social Survey (GSS) on the family, social support and retirement. (For more information, see the text box entitled *"What you should know about this study."*)

What you should know about this study

Data source

The analyses contained in this article are based on data from the General Social Survey (GSS) conducted by Statistics Canada in 2007 on the family, social support and retirement. This survey covers some 23,000 Canadians aged 45 and over, and living in private residences in the ten provinces.

Study population

The population that is the focus of this study consists of persons who have provided assistance to a parent or parent-in-law and who is the primary care receiver. The primary care receiver is defined as the person to whom the respondent devoted the most time and resources during the last twelve months as a result of a chronic health problem or physical limitation. The assistance provided may have been given either throughout the entire year preceding the survey or during a shorter period of time during the preceding year. It is not possible to determine how the care was distributed over the course of the year.

This population corresponds to a sample of 2,700 persons, representing 1.65 million Canadians.

In the 2007 GSS, caregivers were asked where the primary care receiver was living when the unpaid help was provided. Four distance categories corresponding to the travel time between the caregiver's home and that of the care receiver were created (survey participants did not have to provide information on the distance in kilometres): 1) same neighbourhood (30 minutes or less by foot or bus); 2) surrounding neighbourhood or community (less than an hour by car); 3) between one hour and less than a half day's journey by car; and 4) more than a half day's journey by car.

The first section of the article presents general information on the proportion of caregivers living relatively close to their parent's home. In particular, it provides information on the respondents who lived in the same household or building as their primary care receiver. However, in the subsequent sections, these respondents are excluded from the analysis. This group of caregivers living in the same household as their parent has specific characteristics and is dealt with in a supplementary text box entitled *Living in the same household or building as the cared-for parent*.

It should be noted that the analysis provides representative information on caregivers whose primary care-receiver is one of their parents. Thus, it does not cover all caregivers.

Terminology

In this article, persons who assist their parent(s) or provide him or her with care are called 'caregivers.' Parents receiving care are referred to as 'care receivers' or 'care recipients.'

Statistical models

The distance between the place of residence of the caregiver and that of the assisted parent is not the only factor that may explain why some caregivers experience economic and social consequences. To check the robustness of our results with respect to geographic distance, we created logistic regression models. In these models, the dependent variables have two possible values: yes or no. We present the results for two dependent variables: having incurred expenses because of the care provided to the receiver, and missing work. Models were also created for the following three dependent variables: having had to cancel holiday plans because of the care provided to the receiver; having reduced one's social activities; and having reduced one's family time.

The results from these models are analysed using odds ratios. These are employed to evaluate the extent to which the distance from the caregiver's place of residence is associated with experiencing a given consequence when the other factors are held constant (in other words, when neutralizing the effect of the other variables assumed to be associated with the risk of experiencing that consequence).

The factors considered in the model include the number of hours and support activities that caregivers provided to receivers. Variables indirectly associated with the care receiver's health status are also included, such as type of dwelling occupied by the care receiver (private household, supervised dwelling, institution), number of hours of care received from public- or private-sector employees, physical or mental health problems, and whether the main receiver died during the last twelve months; whether or not the caregiver had to move in with the receiver for the duration of the assistance. Lastly, caregiver characteristics are considered: sex, education level, number of brothers and sisters still living, employment status and flexibility of working conditions, and presence of children in the home. Taking these factors into account ensures that a possible association between geographic distance and the consequences is attributable to the distance.

Just over one caregiver in five lives more than an hour away from the assisted parent

In 2007, an estimated 359,700 persons provided help to a parent despite living more than an hour away. These caregivers accounted for one-fifth (22%) of the study population. Even so, a large number of caregivers lived nearby. Almost half (46%) of caregivers lived in the same neighbourhood as their parent, that is, they lived less than 30 minutes away by foot or bus. Another 13% lived in the same household (Table 1).

British Columbia had the largest proportion of caregivers living far from their parent. In that province, nearly one-third (30%) lived more than an hour away from their primary receiver, twice the proportion as in the Atlantic provinces, where they accounted for 14% of caregivers (Table 1).

One of the reasons that may explain this large proportion is that caregivers who live in British Columbia are more likely than those in other provinces to have been born outside the province, either elsewhere in Canada or in another country. Of caregivers living in British Columbia, more than half (52%) were not born in that province. The corresponding proportions were 33% in Ontario, 17% in the Atlantic provinces and 10% in Quebec. It would appear that caregivers who live in the province where they were born are more likely to live near the parent to whom they are providing care (who probably also lives in that province).

Caregivers living further from the care receiver tend to be more educated and concentrated in the largest metropolitan areas

Persons with higher education levels are known to also be more likely to have left their place of origin and, if they have done so, to have migrated to large cities.[6]

Caregivers who lived far from the parent to whom they were providing care were both more educated and more likely to live in a large urban area.

Indeed, 61% of persons living more than a half day's journey from the care receiver had a university diploma, compared to 28% of persons living in the same neighbourhood. Also, among caregivers living far from the assisted parent, more than half (58%) lived in one of Canada's six largest metropolitan areas, namely those with a population of 1 million or more—Toronto, Montreal, Vancouver, Ottawa-Gatineau, Calgary or Edmonton. Among caregivers who lived in the same neighbourhood as the care recipient, the corresponding proportion was 35%.

Since caregivers living a greater distance from their care receivers are, on average, more educated and more concentrated in urban areas than those living closer to their care receivers, it is not surprising to find that they also have higher incomes. Among caregivers living furthest away, nearly two-thirds (64%) had a household income of $80,000 or more. The corresponding proportion was 49% for caregivers living in the same neighbourhood as their primary receiver of care (Table 2).

Regardless of the distance just over 7 in 10 caregivers had employment income

For some people, having a job can be a major constraint on providing care. The results show that regardless of the place of

Table 1 Gender and region of residence of caregivers by proximity to care receiver

	Same household †	Same neighbourhood	Surrounding neighbourhood or community (less than one hour by car)	Between one hour and less than half day's journey by car	More than a half day's journey by car
			percentage		
Total	**13**	**46**	**20**	**15**	**7**
Men	13	48	18	15	7
Women	13	44	21	15	6
Region of residence					
Atlantic region	15	50	21*	10*	4
Quebec	11	50	21	16	3*
Ontario	13	44	20	16	7
Prairie region	12	48	19	13	8
British Columbia	14	38	19	16	13*

† reference group
* statistically significant difference from reference group at $p < 0.05$
Source: Statistics Canada, General Social Survey, 2007.

residence, most caregivers had a job (approximately 70%). The proportion of caregivers who retired did not exhibit statistically significant variations according to geographic distance. However, caregivers living in the same neighbourhood as the assisted parent were more likely than those living more than a half day's journey away not to have a paying job (Table 2). This result is consistent with the finding that persons who help a parent living far away are more likely to have higher incomes.

Caregivers who lived more than a half day's journey away from their primary care receiver were also less likely to have children in the home (38%) than were caregivers who lived closer to their receiver (49%). That said, these children are mostly young adults or teenagers, which likely reduces the caregivers' family responsibilities.

The further away caregivers live, the less likely they are to have come from a large family

The number of siblings in a family can affect the distribution of tasks and the sharing of responsibilities when a parent requires care. All things being equal, it is likely that in the largest families, the burden on each adult child will be less than in smaller families.

The further away caregivers live from care receivers, the less likely they are to come from a large family (four or more brothers and sisters) (Table 2). Indeed, one-third of caregivers who lived more than a half day's journey away from the care recipient parent reported having at most one brother or sister still living (33%); in each of the other distance categories, the corresponding proportion was approximately 10 percentage points lower.

It is possible that some people living more than a half day's journey away from their ailing parent are those who provide care because they are the only ones who are able to do so in their family. Since baby boomers tend to have smaller families than their parents, geographic distance may become a more important barrier in the coming years, when baby boomers grow old and require care themselves.

Caregivers who live further away are more likely to share the responsibilities for care with a professional caregiver (from the public or private sector). Indeed, for 28% of caregivers who lived more than a half day's journey away, the care receiving parent was receiving at least five hours of professional care per week. The corresponding proportion was 12% for persons living in the same neighbourhood as the parent to whom they were providing care (Table 2). This result is consistent with the finding that caregivers living further away from the parent to whom they are providing care tend to come from smaller families and may more often have to draw on more formal sources of assistance.

Despite living far away, caregivers often provide the same types of assistance, and sometimes in larger proportions

Some types of support are more easily provided when the caregiver lives close to the person assisted, such as transportation, shopping, banking or bill paying. And indeed, the proportion of caregivers living in the same neighbourhood as their primary care receiver and engaging in these types of activities was higher (86%) than the corresponding proportion of caregivers living more than a half day's journey away (79%).

Even so, caregivers who live further from their parent perform a great variety of tasks. There were few differences between them and those caregivers living close to the care receiver in the likelihood of assisting with home maintenance and outside work, medical treatment and co-ordination of caregiving tasks. However, caregivers living more than a half day's journey from their parent were more likely than others to have provided domestic assistance, such as meal preparation, meal clean-up and housekeeping, and a greater proportion of them provided personal care (Table 2).

One possible explanation for these findings is that because of the sizeable distance to be travelled, some caregivers may have temporarily stayed with their parent when providing care. Staying in the parent's home (because going back to one's own home on the same day is not realistic), and therefore sharing a number of meals, may be conducive to performing numerous domestic tasks that would not necessarily be performed if only spending a short period of time with the care receiver. Additionally, those staying the night or longer may be prompted to provide additional assistance with various aspects of personal care. That said, the frequency of providing this intensive type of care is lower than for caregivers who reside nearby.

Data from the GSS show that the greater the distance between the caregiver and the receiver, the less frequent the caregiving visits occurred. For example, 85% of persons who lived more than a half day's journey away reported having seen the person they were assisting once a month or less. Conversely, 93% of caregivers living in the same neighbourhood as the assisted parent saw him or her at least once a week or more (Table 2). A recent American study on long-distance caregiving supports this finding.[7] According to that study, even though the types of care generally varied little among caregivers living close or far away, the frequency of care varied considerably.

Living far from the care receiver increases the risk of having extra expenses

The first part of this article profiled caregivers according to whether or not they lived near the care receiving parent. This second part focuses on the possible consequences related to living a considerable distance from the assisted parent. In the GSS, caregivers were asked whether assisting someone had caused them

Table 2 Caregiver characteristics by distance from care receiver

	Same neighbourhood †	Surrounding neighbourhood or community (less than one hour by car)	Between one hour and less than half day's journey by car	More than a half day's journey by car
	percentage			
Education level				
University	28	30	38*	61*
Other postsecondary	38	42	43	28*
High school diploma or less	34	28*	18*	11[E]*
Area of residence				
Greater census metropolitan areas (CMA)	35	46*	52*	58*
Other census metropolitan areas	25	23	19*	14[E]*
Census agglomerations	18	13*	13*	10[E]*
Outside of census metropolitan areas and census agglomerations	22	18	17*	17[E]
Employment status				
Paid employment or self-employed	73	70	73	76
Retired	16	18	16	19[E]
Without paid employment	11	12	11	6[E]*
Household revenue				
Less than $40,000	17	15	14	7[E]*
$40,000 to $79,999	34	37	30	28
$80,000 or more	49	48	56	64*
Presence of children in the home				
None	51	54	50	62*
One child or more	49	46	50	38*
Number of siblings still living				
None or one	23	23	24	33*
Two or three	41	44	46	45
Four or more	36	33	30*	22*
Type of help given to the parent				
Transportation, shopping, banking or paying bills	86	83	78*	79*
Meals, dishwashing, house cleaning, laundry and sewing	46	44	49	60*
Housekeeping or outdoor chores	46	41	50	48
Help with personal care	28	27	33	38*
Help with treatment and medical care	21	17	21	26
Assist with co-ordination of health care needs	44	46	42	49
Living with the care receiver	2[E]	3[E]	3[E]	8[E]*
Number of hours allocated per week to caregiving				
Four or fewer hours	57	61	61*	58
5 to 9 hours	20	19	18	13[E]*
10 to 14 hours	10	10	8[E]	9[E]*
15 hours or more	12	11	11[E]	21*
Frequency of caregiving				
Everyday	23	7*	4[E]*	8[E]*
At least once a week	70	72	40*	7[E]*
Once a month or less	7	20*	56*	85*
Professional help with caregiving (government or paid employee)				
No help	73	71	65*	52*
Fewer than 5 hours per week	15	16	17	20[E]
More than 5 hours per week	12	13	18*	28*

† reference group
* statistically significant difference from reference group at $p < 0.05$
Source: Statistics Canada, General Social Survey, 2007.

to have extra expenses; to miss full days of work; to cancel holiday plans; to reduce the number of their social activities; or to spend less time than they would have liked with their children or spouse.

Living further from the receiver substantially increased the probability of incurring extra expenses. Six in ten caregivers (62%) who lived more than a half day's journey away from their primary receiver had incurred extra expenses as a result of the assistance they provided. This was twice the proportion of those living in the same neighbourhood as their primary receiver (Chart 1).

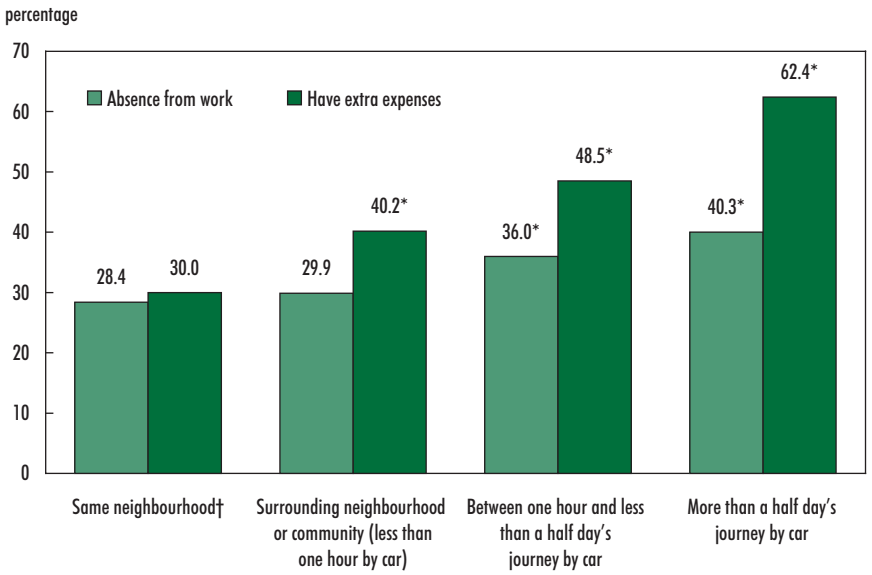
Apart from distance there were a number of other factors that were associated with a higher probability of having extra expenses (e.g., education level and number of hours of care provided). However, even when these factors were held constant (Table A.1), the odds of having extra expenses were 3.0 times higher for caregivers living more than a half day's journey away than for those living in the same neighbourhood. This finding is consistent with the fact that the greater the distance to be traveled, the higher the related costs are likely to be. For those who must travel by air in order to provide care, this reality is clear.

Moreover, when providers of informal care had to incur extra expenses, the expenses were, on average, higher for those who lived far away than for those living closer. Indeed, 39% of those living more than a half day's journey away from the parent being assisted reported that they had spent, on average, more than $500 per month on care. Only 11% of those living in the same neighbourhood reported spending an average of $500 per month.

Despite these sizeable extra expenses, caregivers who had to travel great distances were no more likely than other caregivers to have had access to money from government programs (5%). Also, there was no difference in the likelihood of having access to tax benefits (credits or refunds) for care-related expenses between caregivers living close or caregivers farther away. Only about 2% caregivers had access to such benefits.

Although caregivers living some distance away from the care receiver were more likely to have spent extra amounts on caregiving, they were also more likely to be in a higher income bracket (Table 2) than those living close to the care recipient.

Chart 1 The farther away a caregiver lives from the care receiver, the more likely they are to have extra expenses or be absent from work



† reference group
* statistically significant difference from reference group at $p < 0.05$
Source: Statistics Canada, General Social Survey, 2007.

Providers of informal care who lived further from the care receiver were more likely to miss work

It is possible that the expenses incurred by caregivers living a greater travelling distance away are more difficult to take on when they must take time off work because of the care they provide. This appears to be the case for many: 40% of providers of informal care who lived more than a half day's journey away from their chronically ill parent reported missing full days of work in order to provide the parent with care, compared to 36% of those living between an hour and less than a half day's journey away and 28% of those living in the same neighbourhood (Table A.1).

However, when the other factors associated with the possibility of missing work were considered, persons living more than an hour away and those living more than a half day's journey away were no more likely than those living in the same neighbourhood to have missed work (Table A.2).

This is likely due to the fact that other factors in the model had a substantial impact on the probability of missing work. Two of these factors proved to be associated with a higher risk of missing work: having had to stay with the care receiver because of the types of care provided (2.3 times higher risk of missing work) and having provided a large number of hours of care to the care recipient (for those who had provided 15 hours or more of care, the risk of missing work was 3.3 times higher than for

those providing less than five hours of care) (Table A.2).

Caregivers who lived more than a half day's journey from the parent they were assisting stood out on both these critical factors. First, they were more likely than those living closer to have stayed with their parent in order to provide assistance (8%, compared to 2% for those living nearby). Second, persons living further away were more likely to have provided 15 or more hours of care per week, possibly because of the intensity of the assistance provided during their stays (Table 2).

According to the results of a supplementary analysis (Table A.2, Model 2),[8] living far away from the assisted parent appears to be positively associated with missing days of work as a result of providing care. However, this relationship is indirect and disappears once some caregiving intensity measures (hours of care and staying or moving in to provide care) have been taken into consideration.

Caregivers who lived further from the receiver were no more likely to have to cancel holiday plans

Apart from financial consequences and time away from work, we looked at the negative effect of distance on other aspects of the caregiver's life: cancelling holiday plans, reducing social activities, and spending less time than desired with their children or spouse.

The geographic location of the caregiver in relation to the care receiver was not related to these types of consequences. Instead, other factors associated with intensity of care, such as the number of hours and the number of types of care provided, had a negative effect (Table A.1).

Among caregivers who lived further away from the receiver, women were more likely than men to take time off work

A supplementary statistical analysis was conducted to determine whether the different factors associated with an increased probability of having extra expenses and missing work were different for caregivers living further away from the assisted parent than for those living in the same neighbourhood as the parent or in the surrounding area (detailed results not shown). With respect to financial resources, these factors were nearly the same regardless of distance. In fact, for both groups, the two factors that most affected the likelihood of having extra expenses were the number of types of care provided and the number of hours devoted to care.

The factors that were related to increasing the probability of missing work were very similar between caregivers living nearby and those living further from the care receiver. For both groups, engaging in more types of support activities and providing care to a greater overall number of people were associated with a greater probability of missing work.

Living in the same household or building as the cared-for parent

In some cases, it may be easier for caregivers to live in the same dwelling or the same building as the care receiver. One of the characteristics of caregivers living in the same dwelling or the same building as the parent to whom they provide informal care is the small size of their family, that is, the number of siblings still living. Among caregivers who lived in the same dwelling or building as the care receiver, 41% said they had at most one brother or sister still living. Among other caregivers, the proportion was 24%.

Nearly 1 in 5 caregivers (18%) who lived with the care receiver did not have a job; this was higher than for other caregivers (10%). This characteristic is consistent with the time these caregivers devoted to care. Living in the same dwelling or building as the assisted person makes it possible to devote much more time and provide more types of care. In fact, more than half (57%) of caregivers living in the same household had devoted more than 10 hours per week to the parent to whom they were providing care. Furthermore, the number of hours of care per week is estimated at 29 for these caregivers, which is almost three times the number for caregivers living outside the receiver's dwelling or building. The latter devoted an average of 8 hours per week to care.

These results were also reflected in the number and type of support activities provided: 38% of caregivers who lived with the care receiver provided five to six types of support activities, which is twice as high as for other caregivers (17%).

In addition to the information about those who provided care, the 2007 General Social Survey contains information on persons who receive care because of a chronic health problem. It is possible to determine the health status of persons whose primary caregiver was their child. Those who lived with their caregiver were proportionally less likely to be in good health. More specifically, 44% of care receivers who lived with their primary caregiver described their state of health as fair or poor. The corresponding proportion was 33% for care receivers whose caregiver lived an hour or more away from their place of residence (by car).

Table A.1 Percent of caregivers who experienced social and economic consequences, by select characteristics

	Type of consequences				
	Extra expenses	Absence from work	Cancel holiday plans	Reduction of social activities	Reduction of family time
	percentage				
Caregiving factors					
Distance from care receiver					
Same neighbourhood (30 minutes by foot or bus)†	30	28	23	40	24
Surrounding neighbourhood or community (less than one hour by car)	40*	30	25	41	23
Between one hour and less than a half day's journey by car	49*	36*	23	43	30
More than a half day's journey by car	62*	40*	27	40	24E
Moved in with the care receiving parent					
Yes	73*	74*	59*	77*	73*
No†	37	30	23	40	24
Number of hours allocated per week to caregiving					
Four or fewer hours†	31	23	13	29	17
5 to 9 hours	41*	35*	33*	49*	28*
10 to 14 hours	48*	42*	38*	60*	51*
15 or more hours	60*	62*	50*	70*	54*
Number of caregiving activities performed					
One to two†	26	19	12	24	13
Three to four	41*	34*	26*	48*	28*
Five to six	61*	57*	50*	67*	53*
Total number of care recipients					
One†	35	29	21	37	20
Two	40*	32	26*	43*	29*
Three or more	51*	40*	35*	55*	36*
Type of problem of the parent receiving care					
Physical or mental†	35	29	22	36	22
Physical and mental	50*	37*	31*	56*	37*
Other	21E*	23E	F	21E*	F
Death of care receiver					
Deceased	48*	41*	44*	56*	39*
Not deceased†	37	30	22	39	24
Professional help with caregiving (government or paid employee)					
No help†	35	28	22	38	24
Fewer than 5 hours per week	40	34	27	43	24
More than 5 hours per week	49*	40*	31*	54*	34*
Type of dwelling occupied by parent					
Private household†	36	30	23	40	25
Supervised dwelling	50*	36	23	44	24
Institution	38	32	25	40	24
Caregiver characteristics					
Gender					
Men†	36	26	19	35	18
Women	40	36*	27*	45*	31*
Education level					
University	46*	33*	27*	45*	28*
Other postsecondary	38*	32	23	41*	26*
High school diploma or less†	29	27	21	34	19
Employment status and flexibility of work arrangements					
Paid employment with low flexibility†	38	29	23	44	29
Paid employment with high flexibility	36	31	23	42	26
Self-employed	42	34	21	35*	24
Retired	40	...	27	40	14E*
Without paid employment	34	...	25	36*	29

Table A.1 Percent of caregivers who experienced social and economic consequences, by select characteristics (continued)

	Type of consequences				
	Extra expenses	Absence from work	Cancel holiday plans	Reduction of social activities	Reduction of family time
	percentage				
Presence of children in the home					
None†	39	33	26	41	18
One or more	37	30	21*	41	30*
Number of siblings still living					
One or none†	40	36	26	40	22
2 or 3	39	30	24	43	30*
4 or more	35	29*	21	38	21

† reference group
* statistically significant difference from reference group at $p < 0.05$
Source: Statistics Canada, General Social Survey, 2007.

Table A.2 Odds ratio of having extra expenses or being absent from work for caregivers

	Extra expenses	Absence from work, model 1	Absence from work, model 2
	odds ratio		
Caregiving factors			
Distance from care receiver			
Same neighbourhood (30 minutes by foot or bus)†	1.00	1.00	1.00
Surrounding neighbourhood or community (less than one hour by car)	1.73*	1.11	1.15
Between one hour and less than a half day's journey by car	2.27*	1.46	1.52*
More than a half day's journey by car	3.02*	1.14	1.68*
Moved in with care receiving parent			
Yes	2.07*	2.29*	...
No†	1.00	1.00	...
Number of hours allocated per week to caregiving			
Four or fewer hours†	1.00	1.00	...
5 to 9 hours	1.59*	1.47*	...
10 to 14 hours	1.61*	1.44	...
15 or more hours	2.31*	3.35*	...
Number of caregiving activities performed	1.33*	1.42*	1.54*
Total number of care receivers			
One†	1.00	1.00	1.00
Two	1.29	1.57*	1.36*
Three or more	1.90*	1.87*	1.54
Type of problem of the parent receiving care			
Physical or mental†	1.00	1.00	1.00
Physical and mental	1.60*	1.25	1.15
Other	0.69	1.32	1.11
Death of care receiver			
Deceased	0.96	0.98	1.22
Not deceased†	1.00	1.00	1.00

Table A.2 Odds ratio of having extra expenses or being absent from work for caregivers (continued)

	Extra expenses	Absence from work, model 1	Absence from work, model 2
		odds ratio	
Professional help with caregiving (government or paid employee)			
No help†	1.00	1.00	1.00
Fewer than 5 hours per week	1.11	1.23	1.16
More than 5 hours per week	1.24	1.37	1.38
Type of dwelling occupied by parent			
Private household†	1.00	1.00	1.00
Supervised dwelling	1.73*	1.37	1.35
Institution	1.14	1.42	1.29
Caregiver characteristics			
Gender			
Men†	1.00	1.00	1.00
Women	0.96	1.42*	1.40*
Education level			
University	1.71*	1.15	1.03
Other postsecondary	1.28	1.06	1.12
High school diploma or less†	1.00	1.00	1.00
Employment status and flexibility of work arrangements			
Paid employment with low flexibility†	1.00	1.00	1.00
Paid employment with high flexibility	0.76	0.82	0.85
Self-employed	1.03	1.25	1.27
Retired	0.85	...	...
Without paid employment	0.80	...	...
Presence of children in the home			
None†	1.00	1.00	1.00
One or more	1.03	0.94	0.87
Number of siblings still living			
One or none†	1.00	1.00	1.00
2 or 3	1.02	0.73	0.69*
4 or more	0.97	0.82	0.78

† reference group
* statistically significant difference from reference group at $p < 0.05$
Source: Statistics Canada, General Social Survey, 2007.

However, there were differences between men and women caregivers with respect to geographical distance from the care receiver. Among those living more than an hour's journey away (including those living more than a half day's journey away), 46% of women missed days of work to provide care, compared to 27% of men. Among those living less than an hour away, the corresponding proportions were 32% for women and 26% for men. Women were generally more likely to provide care than men. It appears that when women live further from their parents, they are more inclined than men to miss days of work to look after their parents (either because it is possible for them to do so or because they are more inclined than men to take on the possible consequences of this absence from their work).

Summary

Many people provide assistance to their parents even though they live relatively far away. In fact, one fifth of the population aged 45 and over whom provided care to a parent lived more than an hour away.

The profile of these caregivers was different from that of caregivers who lived closer to the care receiving parent. Those who lived farther away were generally more educated, had higher incomes, had on average fewer brothers and sisters, and tended to live in the largest metropolitan areas.

Distance appears to be one of the most influential factors for caregivers related to the risk of experiencing financial consequences. People who lived further away were found to be much more likely to have extra expenses. When they did, they spent larger amounts. Also, although factors

other than geographic distance (e.g., intensity of care provided) were better predictors of the risk of missing work, caregivers living further from the assisted parent were found to be more likely to miss full days of work. However, the geographic constraint was not associated with the negative impacts of caregiving on the caregiver's social or family life.

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1. Cranswick, K., and Dosman, K. (2008). Eldercare: What we know today. *Canadian Social Trends, 86*, Statistics Canada, Catalogue no. 11-008.
2. Cranswick and Dosman (2008).
3. Pyper, W. (2006). Balancing career and care. *Perspectives on Labour and Income, 11*, Statistics Canada, Catalogue no. 75-001.
4. Vézina, M. and M. Turcotte. (2009). Forty-year-old mothers of pre-school children: A profile. *Canadian Social Trends, 88*, Statistics Canada, Catalogue no. 11-008. Williams, C. (2004). The sandwich generation. *Perspectives on Labour and Income, 5*, Statistics Canada, Catalogue no. 75-001.
5. Pyper, W. (2006).
6. Dion, P., and Coulombe, S. (2008). Portrait of the mobility of Canadians in 2006: Trajectories and characteristics of migrants, Statistics Canada, Report on the Demographic Situation in Canada: 2005 and 2006, p. 83-114.
7. Metlife Mature Market Institute. (2004). *Miles away: the Metlife study of long-distance caregiving – Findings from a national study by the national alliance for caregiving with Zogby international July 2004*.
8. In this supplementary logistic regression analysis, all factors in the first model are included except having stayed with the care receiver and the number of hours of care. When these two variables are not included in the regression, a statistically significant relationship is observed between greater distance and a greater risk of missing work as a result of providing care to the receiver (this is the same finding as presented in Table A.1, where the results are shown in percentage form).

Retail and customer service in French

by Martin Turcotte

For most francophones (people whose first language learned is French), being greeted and served in their language when they shop, eat out or go to the hairstylist is not a concern. In fact, a majority live in areas where most residents are also francophones.[1] It's a different story, however, for those who live in regions where their mother tongue is a minority language. This may also be true for francophones who reside in areas such as Montréal where French, though the majority language, is a minority in some places.

To what extent are francophones able to get service in French when they visit businesses in their community? This article provides some answers to that question, focusing on the prevalence of the knowledge of French among sales and service workers who interact *directly* and *routinely* with consumers in the course of their work (For more information about the occupations included in the study, see "What you should know about this study").

Previous studies have examined the availability of health care or government service in French.[2] However, very little research has been done on the knowledge and use of French among workers in retail and consumer service outlets. This study attempts to determine the extent to which francophone consumers are able to use their language on a daily basis in "routine" retail and service transactions. A number of occupations have been omitted as most people have only occasional contact with workers in those occupations, for example with real estate agents, physicians and police officers.

In addition to looking at how prevalent knowledge of French is among workers in sales and service occupations, the article also examines the proportion of workers who use the language while performing their duties.

The first section of the article presents data for Canada, the provinces and territories. It contains information on the knowledge and use of French among sales and service workers.

The second part of the article focuses on sales and service workers in four census metropolitan areas (CMA): Ottawa-Gatineau (with a distinction between the Quebec and Ontario sides), Moncton, Greater Sudbury and Montréal. These CMAs have been chosen because of their specific demolinguistic context and because the number of workers that understand and are able to use French is high enough to allow for comparisons over time.

In the Ontario part of Ottawa-Gatineau, Greater Sudbury and Moncton, francophones are a minority. It may be a challenge for them to receive service in French at local businesses. In the Montréal CMA, francophones are in a majority and account for about two-thirds of the population. However, this proportion varies widely within the CMA – francophones while representing 80% of the population in the northern and southern-most sections of the CMA, are slightly in the minority on the Island of Montréal (49.8 % in 2006[3]) and are a minority in all municipalities on the West Island. For example, francophones make up 20% of the population in the municipalities of Dollard-des-Ormeaux and Côte-Saint-Luc.[4] As a result of this linguistic dynamic, understanding how French is used in the marketplace in Montreal is important.

In short, in these four metropolitan areas, contact between francophones and other linguistic groups is likely regular notably during commercial transactions. From census data, it is possible to determine what proportion of workers can, with their knowledge of French, offer services in this language (according to their place of work). In the final part of the article, those sales and service workers most or least likely to be proficient in French are examined.

What you should know about this study

The data used are from the 1991, 1996, 2001 and 2006 long census questionnaires (completed by 20% of the Canadian households). Only persons in the employed labour force are included in the study, that is, people who had a job in the week preceding the census. In addition, respondents had to have a usual place of work or to be working at home (in other words, people with no fixed work location are excluded). The statistics concerning knowledge and use of French among sales and service workers are based on location of work and not on place of residence. For example, references to the proportion of central Montréal's workers who were able to carry on a conversation in French relate to persons working in a business outlet located in the central area.

Definitions

Knowledge of French: In the census, each household member is asked whether he or she can speak "English or French well enough to conduct a conversation". People who stated that they spoke "French only" or "English and French" are deemed to have knowledge of French. It should be noted that the ability to carry on a conversation is self-assessed by respondents and that the ability to speak French does not necessarily mean that service in French will be offered automatically. Moreover, proficiency can vary substantially from person to person.

Use of French at work: The census contains the following questions: "In this job, what language did this person use most often?" and "Did this person use any other languages on a regular basis in this job?" Respondents who answered French to either of these questions were deemed to be using French at work. More detailed data on the use of French "on a regular basis" or "most often" are provided in the tables.

Francophones: In this study, francophones are persons who reported that French was the first language they learned in childhood (their mother tongue). Some respondents reported that they had learned more than one language at the same time. They are considered francophones if one of the languages was French.

Allophones: Allophones are people who stated that the first language they learned in childhood was neither English nor French. Respondents who reported a non-official language along with French are considered francophones. Similarly, people who reported a non-official language along with English are considered anglophones, unless they also mentioned French as one of their mother tongues (in which case they are deemed to be francophones).

Anglophones: In this study, anglophones are persons who reported that English was the first language they learned in childhood (their mother tongue). Respondents who reported that they had learned English and French simultaneously are considered francophones for the purposes of this study.

French-speaking population: Some sections of the article refer to data from the Survey on the Vitality of Official-Language Minorities. Those data relate to the French-speaking population outside Quebec, that is, people who: (a) have French as their mother tongue, either alone or with another language; (b) have a non-official language as their mother tongue (we refer to them as allophones) and speak French but not English; (c) have a non-official language as their mother tongue, know both English and French and speak either a non-official language or French, alone or with another language, most often at home.

Sales and service occupations

The National Occupational Classification-Statistics (NOC-S) is based on the National Occupational Classification (NOC), which was developed, and is maintained, by Human Resources and Skills Development Canada (HRSDC). It provides a systematic classification structure to identify and categorize the entire range of occupational activity in Canada. It has 10 broad occupational categories.

This study focuses on broad category G, sales and service occupations. The official titles of the occupations included in this analysis are as follows: retail salespersons and sales clerks; cashiers; maîtres d'hôtel and hosts / hostesses; bartenders; food and beverage servers; travel counsellors; airline sales and service agents; ticket agents, cargo service representatives and related clerks (except airline); hotel front desk clerks; tour and travel guides; outdoor sport and recreational guides; casino occupations; operators and attendants in amusement, recreation and sport; hairstylists and barbers; estheticians, electrologists and related occupations; service station attendants; and grocery clerks and store shelf stockers. Some occupations were combined with related occupations in Table 4.

About 50% of the occupations in the sales and service category were not included in this study. Some do not necessarily involve direct contact with consumers and

What you should know about this study (continued)

therefore have no bearing on consumers' ability to obtain service in French (for example, retail trade supervisors, chefs and cooks, retail and wholesale buyers, security guards). Other occupations involve contact with "citizens" rather than consumers (for example, police officers). In addition, some occupations are associated with the sale of specialized products and service purchased by members of the public and by businesses and organizations (for example, insurance agents and brokers). Since this study is about workers who routinely come into contact with the public, those occupations were also excluded. In some occupations, workers may or may not have direct contact with customers (e.g., pet groomers). As census data do not provide information about whether there is contact with customers or not, the decision was made to err on the conservative side and exclude occupations that potentially do not involve interaction with customers.

Census metropolitan areas and census agglomerations

For the purposes of this article, urban area is narrowly defined. There are two types of urban areas: census metropolitan areas (CMAs) and census agglomerations (CAs). A CMA or a CA consists of one or more neighbouring municipalities situated around a major urban area (referred to as an urban core). A CMA must have a total population of at least 100,000, of which 50,000 or more must live in the urban core. A CA must have an urban core population of at least 10,000. In 2006, there were 33 CMAs and 110 CAs.

For the data to be comparable over time, the 2006 CMA boundaries were applied to the data from the 2001 and 1996 censuses.

Montréal CMA, Island of Montréal, city of Montréal and Montréal's city centre

Montréal's CMA includes the city of Montréal as well as a hundred more municipalities surrounding it. Some are located in the suburbs, some on the Island of Montréal. The north and south suburbs, as defined in this study, include the municipalities of Laval, Longueuil, Terrebonne, Brossard and many others. The Island of Montréal includes the city of Montréal as well as 15 other municipalities which are classified in the tables under the category other municipalities on the Island of Montréal.

In this study, Montréal's city centre is defined as the rectangular area bisected by Sainte-Catherine Street, the main commercial artery. The area is bounded on the west by Atwater Street, on the north by Sherbrooke Street, on the east by Amherst Street and on the south by Saint-Antoine Street. Between Atwater Street and Guy Street, the southern boundary is located just north of the Ville-Marie highway.

The proportion of sales and service workers who know French is generally higher than the proportion of francophones in the region

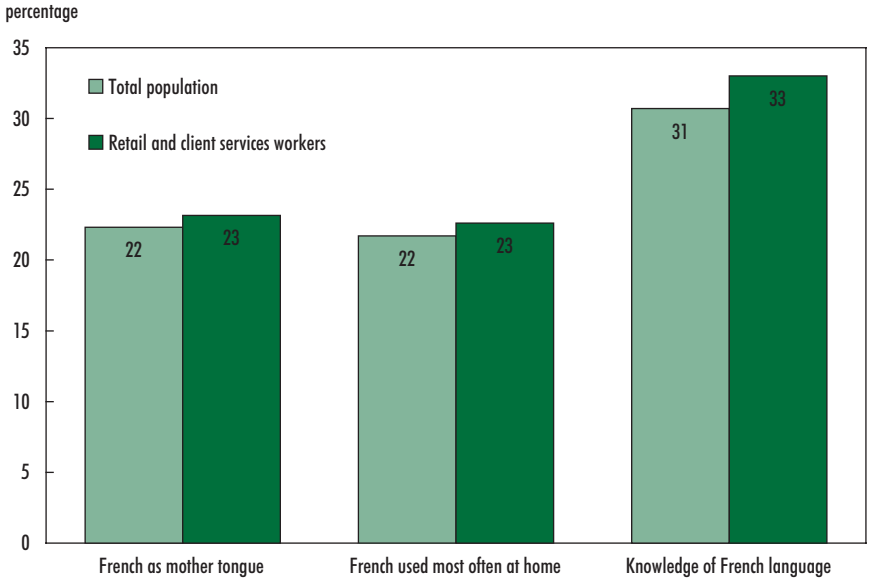
In 2006, there were 6,970,405 francophones in Canada; in this article, a francophone is someone whose mother tongue, or one of them, is French (for more information on these concepts, see "What you should know about this study"). At that time, francophones made up 22% of the population. The proportion of Canadians who could carry on a conversation in French was higher at 31%, because some people whose mother tongue is not French are able to carry on a conversation in French.

People whose job was to serve customers in stores, restaurants and other service outlets were somewhat more likely to know French than Canadians as a whole. In 2006, 33% of these workers were able to carry on a conversation in French. The gap between sales and service workers and the population of a particular area with respect to knowledge of French was observed in almost every province (Table 1). In a number of regions, sales and service workers were more likely to know French than workers in other occupations. This may be attributed to the fact that sales and service workers are, on average, younger than other workers (median age of 33 years for sales and service workers compared to 41 years among other workers). Indeed, outside Quebec, young adults are more likely to be bilingual than are people in other age groups.[5]

As shown in Chart 2, in all areas where 80% or more of the population was francophone almost all sales and service workers were able to carry on a conversation in French.

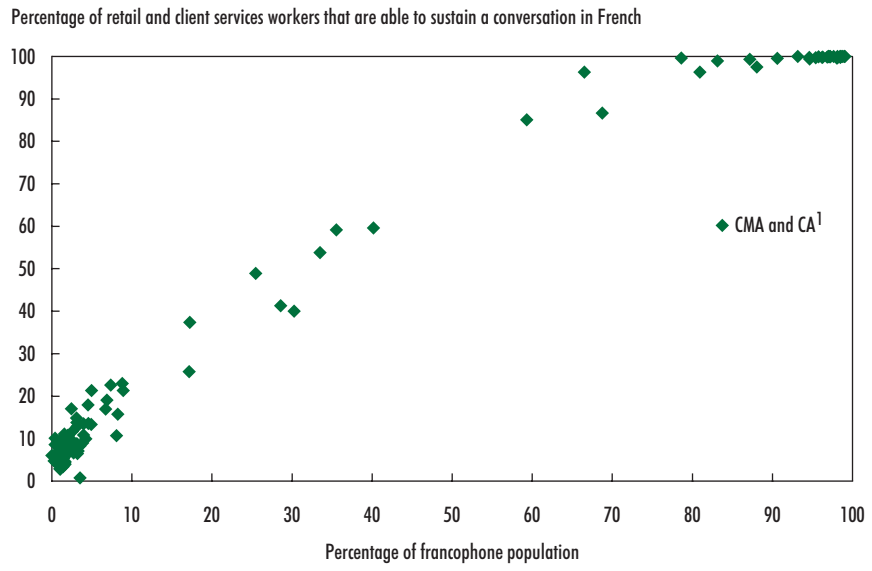
In urban areas where francophones constitute a minority, there was a much greater range and variability in the knowledge of French. Knowledge of French among the residents of a

Chart 1 Retail and client services workers are more likely to be able to sustain a conversation in French than the overall population, Canada, 2006



Source: Statistics Canada, Census of Population, 2006.

Chart 2 In communities where 80% or more of the residents are francophones, almost all of the retail and client services workers are capable of sustaining a conversation in French, 2006



1. Census metropolitan area and census agglomeration.
Source: Statistics Canada, Census of Population, 2006.

Table 1 Knowledge of French of retail and client services workers and of the total population, by province and territory, 1991 to 2006

	Workers in retail and client services				Total population
	1991	1996	2001	2006 †	2006
	percentage				
Canada	**33.2**	**33.0**	**33.0**	**33.0**	**30.7**
Province or territory of work					
Newfoundland and Labrador	4.2*	4.2*	5.8*	7.5	4.7
Prince Edward Island	13.2*	15.3	15.8	17.6	10.6
Nova Scotia	11.1*	12.0	13.2	12.8	12.8
New Brunswick	44.1*	46.1*	47.1	48.3	43.6
Quebec	97.2*	97.8	98.2*	97.8	94.5
Ontario	14.5*	14.8*	14.2*	12.7	11.9
Manitoba	11.1	12.8	13.1*	11.8	9.3
Saskatchewan	5.2*	6.6	7.2	6.7	5.0
Alberta	8.7	9.4*	9.3*	8.5	6.9
British Columbia	8.3	9.5*	9.1*	8.5	7.3
Yukon Territory	11.2*	10.5*	14.5	17.4	9.1
Northwest Territories	8.3	8.2	10.0	9.5	11.8
Nunavut	...	...	6.2	5.5	4.0

† reference group
* statistically significant difference from reference group at $p < 0.05$
Sources: Statistics Canada, Census of Population from 1991 to 2006.

particular area may be affected by a number of factors: history, language policy, geographic location, residents' background, the prevalence of linguistically mixed unions, French-as-a-second-language training in local educational institutions, and so on. Not surprisingly, in areas where less than 5% of the population was francophone, less than 25% of sales and service workers were able to carry on a conversation in French.

Knowledge of French among sales and service workers is increasing in New Brunswick, Newfoundland and Labrador, Prince Edward Island and the Yukon

In Canada as a whole, the prevalence of the knowledge of French among sales and service workers remained virtually unchanged between 1991 and 2006. At the provincial level, however, there were some differences, as knowledge of French generally increased faster in most of the Atlantic provinces (Table 1). In Newfoundland and Labrador, Prince Edward Island and New Brunswick, the proportion of sales and service workers capable of carrying on a conversation in French increased. There was a similar trend in the Yukon Territory. These variations may be due to changes in the relative number of francophones or to changes in the prevalence of the knowledge of French.

Conversely, in Ontario, the percentage of workers in these occupations who spoke French was lower in 2006 than in the three previous censuses. The situation was relatively stable in the other provinces.

The higher the proportion of francophones relative to the total population, the higher the proportion of sales and service workers who use French at work

Previous studies have shown that the higher the geographic concentration of a linguistic minority group, the greater the community's linguistic vitality.[6] Hence, the higher the percentage of francophones in a particular community, the stronger the sense of belonging to the minority group, the greater the tendency to consider it important to use French in everyday living and, ultimately, the more regularly French is used.

The pattern was similar for the prevalence of the use of French by workers who interact directly with the customers of businesses in a particular area: the higher the proportion of francophones in an area, the higher the proportion of the area's sales and service workers who used French most often or regularly at work.

In a number of areas, many workers know French but few use it

In almost every urban area in Quebec the proportion of workers who knew French was almost equal to the proportion of workers who used it at work. Outside Quebec, on the other hand, the proportion of workers who used French at work was lower than the proportion of workers who understood French. That is not surprising, since some of these workers were employed in markets that serve very few customers who request service in French (data not shown).

This section examines the knowledge and use of French among sales and service workers in four CMAs and the evolution of this knowledge and use over time. In order to provide details and context, a supplementary table is presented in the appendix. Table A.1 compares the proportions of sales and service workers who know French with workers in other occupations.

Moncton CMA: Francophones make up more than one-third of the population

With 126,400 residents, the Moncton CMA is New Brunswick's most populous urban area. It had a higher proportion of francophones (36% of the population had French as their mother tongue) in 2006 than any other urban area (CMA or CA) in Canada outside of Quebec.

In view of this demolinguistic reality, it is no surprise that the proportion of workers in Moncton who were able to converse in French was relatively high compared with the proportion in most other urban areas outside Quebec. In 2006, 59% of sales and service workers whose place of work was in the Moncton CMA knew French well enough to be able to carry on a conversation. The corresponding proportion in 2001 was 53% (Table 2).

Knowledge of French among sales and service workers varied by district and municipality within the Moncton metropolitan area. For example, 71% of workers whose place of employment was in Dieppe knew French, compared with 58% in the municipality of Moncton (where francophones make up a smaller proportion of the population) (data now shown).

Moncton CMA: A growing proportion of sales and service workers use French at work

In 2006, just over half (51%) of Moncton's sales and service workers used French at work; this is an increase from 2001. The gain was the result of an increase in the proportion of workers who used French more

Table 2 Knowledge of French of retail and client services workers and the workers in other occupations, 1996, 2001 and 2006

	Knowledge of French					
	Retail and client services workers			Other occupations		
	1996	2001	2006 †	1996	2001	2006
	percentage					
Place of work (CMA[1])						
Moncton	54.8*	53.2*	59.1	50.8‡	53.0	55.1‡
Greater Sudbury	41.9	43.3	41.3	40.3	40.7	41.5
Ottawa-Gatineau	56.3*	56.6*	53.8	54.9‡	54.7‡	56.4‡
Ottawa-Gatineau (Que.)	97.8	98.3	97.8	88.8‡	89.1‡	90.6‡
Ottawa-Gatineau (Ont.)	45.6*	45.0*	41.1	47.8‡	47.8‡	49.2‡
Parliament Hill	51.6	50.5	51.8	61.8‡	63.2‡	66.2‡
Byward Market	57.0*	50.7	45.0	55.5	54.5	56.8‡
Montréal	96.3	97.0*	96.3	93.5‡	94.2‡	94.2‡
Suburban rings of Montréal	99.0	99.2	99.0	97.8‡	98.2‡	98.1‡
Island of Montréal	94.5	95.4*	94.2	91.6‡	92.5‡	92.2‡
City of Montréal (without the city centre)	..	96.0*	95.2	..	93.0‡	92.8‡
Other municipalities on the Island of Montréal	..	93.2*	90.5	..	87.1‡	86.7‡
City centre	93.9	95.0*	93.4	94.0	95.1	94.2
East of Saint-Laurent	95.6	95.9	95.2	97.8‡	98.2‡	97.2
Between Saint-Laurent and Peel	94.8	95.6*	93.1	94.7	95.8	94.9‡
West of Peel	91.4	93.6	93.0	90.3	91.7‡	91.1

† reference group
* statistically significant difference from reference group at $p < 0.05$
‡ statistically significant difference between retail and service workers and the workers in other occupations (for the same reference year)
1. Census metropolitan area.
Source: Statistics Canada, Census of Population, 1996 to 2006.

often than any other language at work (Table 3).

According to the 2006 Survey on the Vitality of Official-Language Minorities (SVOLM), 60% of the Moncton CMA's *French-speaking population*[7] felt that the presence of French had increased in their municipality over the previous 10 years.

Greater Sudbury CMA: 3 in 10 are francophones

In 2006, 44,690 francophones lived in the Greater Sudbury CMA in northern Ontario, accounting for 29% of the population. "The Sudbury francophone community has deep historical roots and is rightly described as a founding community".[9] Well-established French language media, organizations and institutions are all examples of French culture, identity and life in Sudbury.

Use of French by customers

The 2006 Survey on the Vitality of Official-Language Minorities (SVOLM) provides information about the use of French by customers. This information is a valuable addition to the census data on the use of French by workers. According to the SVOLM data, 55% of Moncton's *French-speaking population* used French when they spoke to the employees of the businesses they visited most often (the remainder used English only or much more often).[8] The corresponding proportion for Ottawa-Gatineau was 38% (Ontario side only) (see "What you should know about this study", where the distinction between *French-speaking population* and *francophones* is explained).

In 2006, 41% of sales and service workers in Greater Sudbury had sufficient knowledge of French to carry on a conversation. This proportion has changed little over the previous ten years. Interestingly, francophones were not as highly represented in sales and service occupations (25% of workers) as they were in other occupations (29%) (Table A.1).

On the other hand, the proportion of workers who used French at work remained relatively stable between 2001 and 2006 at around 30% (Table 3).

Table 3 Use of French at work by retail and client services workers, 2001 and 2006

	Use of French at work					
	Most often		Regularly		Total	
	2001	2006 †	2001	2006 †	2001	2006 †
	percentage					
Place of work (CMA[1])						
Moncton	16.3*	21.4	29.8	29.2	46.1*	50.5
Greater Sudbury	6.7	6.1	23.3	22.8	30.0	28.9
Ottawa-Gatineau	27.3	27.2	17.6*	16.1	44.8*	43.3
Ottawa-Gatineau (Que.)	93.1	93.2	3.2	3.8	96.2	97.0
Ottawa-Gatineau (Ont.)	9.0	8.1	21.6*	19.7	30.6*	27.8
Parliament Hill	12.7	9.5	29.4	30.4	42.1	39.9
Byward Market	8.8	7.7	32.4	29.8	41.2	37.5
Montréal	86.5*	85.5	9.3*	10.1	95.8	95.6
Suburban rings of Montréal	97.0*	96.4	1.8	2.2	98.8	98.6
Island of Montréal	78.8*	76.7	14.9*	16.5	93.6	93.2
City of Montréal (without the city centre)	85.5*	83.4	9.3*	11.1	94.8	94.5
Other municipalities on the Island of Montréal	54.7*	50.4	34.7*	37.7	89.4	88.0
City centre	74.6	73.2	18.5	19.2	93.1	92.4
East of Saint-Laurent	87.7	86.1	7.0	8.9	94.7	95.0
Between Saint-Laurent and Peel	75.5	74.5	17.7	17.3	93.1	91.8
West of Peel	67.5	65.8	24.9	26.7	92.4	92.5

† reference group
* statistically significant difference from reference group at $p < 0.05$
1. Census metropolitan area.
Sources: Statistics Canada, Census of Population from 2001 and 2006.

The stability in the knowledge and use of French among sales and service workers was reflected in the perception of the status of French in this community. According to the SVOLM data, almost half of francophones in Greater Sudbury stated that the presence of French in their community had not changed in 10 years (the remainder were almost equally divided between those who thought the situation had improved and those who thought it had worsened).

Ottawa-Gatineau CMA: Two sides of the river, two very different realities for francophones

In 2006, the Ottawa-Gatineau CMA had a population of 374,200 francophones or about one-third of the total population.

The fact that there is a much higher concentration of francophones on the Quebec side than on the Ontario side has consequences for the proportion of sales and service workers on either side of the river who understand and can use French. In 2006, almost all sales and service workers whose place of employment was on the Quebec side of the Ottawa-Gatineau CMA knew French (98%). On the Ontario side, 41% of sales and service workers were able to carry on a conversation in French; for individual neighbourhoods and municipalities within the CMA, the proportion varied with the proportion of francophones in the local population. For example, 89% of sales and service workers whose place of employment was in the municipality of Rockland, which has a francophone majority, knew French.

In the area that includes Parliament Hill and downtown Ottawa, which welcomes many Canadian and foreign tourists, and is the workplace for many francophone public servants, just over half of the sales and service workers could carry on a conversation in French in 2006 (52%). The corresponding proportion was 45% for workers in the Byward Market, well known for its restaurants, public market and bars (Table 2).

Ottawa-Gatineau CMA: Knowledge of French among sales and service workers steady in Quebec, down slightly from five years ago in Ontario

On the Quebec side of the Ottawa-Gatineau CMA, there was little change in the knowledge of French among sales and service workers between 1996 and 2006. On the Ontario side of the Ottawa-Gatineau CMA, however, the prevalence of the knowledge and use of French declined since 2001. The decrease in the prevalence of French in the Ottawa-Gatineau CMA was a major factor in the decline of the proportion of sales and service workers in Ontario who knew French.

The decline in the prevalence of knowledge of French among sales and service workers on the Ontario side of the Ottawa-Gatineau CMA is contrary to the trend in other occupations in the same area. In fact, people in occupations other than sales and service were more likely to know French in 2006 than they were in 2001 and 1996 (Table 2). This trend may be the result of two phenomena. First, the proportion of allophone sales and service workers (workers whose mother tongue was neither English nor French) increased somewhat between 2001 and 2006 (from 16% to 20%). Second, those allophone workers, in addition to being more numerous, were less likely to know French in 2006 (23%) than they were in 2001 (32%). The two patterns were not evident in other occupations (data not shown).

Ottawa-Gatineau CMA: The use of French is less common than knowledge of French on the Ontario side

Many sales and service workers on the Ontario side of the CMA were able to provide service in French but did not report doing so on a regular basis. The proportion who reported using French at work (at least regularly) was 28%, compared with 41% who knew the language (Tables 2 and 3).

This situation may be the result of two factors. First, in some parts of the city there are few francophone residents and thus even if many retail or service employees know French, they may not use it on a regular basis.

Second, francophone customers do not always request service in French. Moreover, SVOLM data show that when French-speaking adults living on the Ontario side converse with employees of the businesses they visit most often, 62% of them stated that they used English much more often than French.[10]

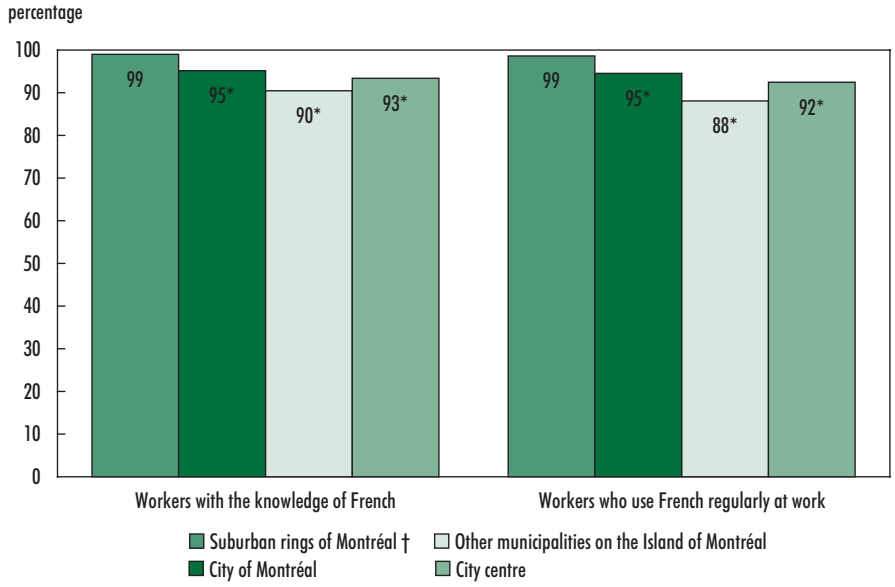
Montréal CMA: Workers in the city centre are slightly less likely to know French than workers elsewhere in the city

In 2006, almost all sales and service workers in the province of Quebec (98%) knew French (Table 1). In most urban areas of the province, the proportion was close to 100% (data not shown).

In the Montréal CMA, 96% of those with sales and service jobs knew French. Given the geographical distribution of anglophones, allophones and francophones in the Montréal CMA, the proportion of workers who knew French was higher in the suburbs (99%) than in the city of Montréal (95%) and in the municipalities located on the Island of Montréal (90%). In Montréal's city centre, 93% of workers knew French in 2006 (Chart 3). There were no statistically significant differences between the western and eastern parts of the centre (Table 2).

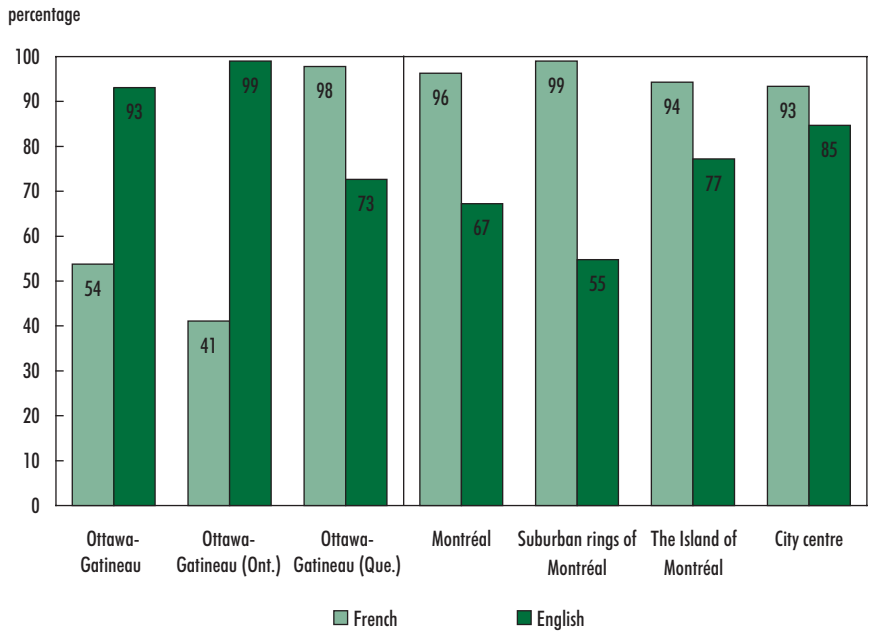
In other municipalities on the Island of Montréal (where francophones account for about a quarter of the population) the percentage of workers who knew French varied. As an example, in Côte-Saint-Luc, 82% of workers in sales and service could speak French. The corresponding proportions were 86% in Dollard-des-Ormeaux and 93% in Pointe-Claire (data not shown).

Chart 3 The proportion of retail and client services workers who know and use French is lower in Montréal's city centre than in the suburban rings, 2006



† reference group
* statistically significant difference from reference group at $p < 0.05$
Source: Statistics Canada. Census of Population. 2006.

Chart 4 In the Montréal city centre retail and client services workers are almost as likely to know English as French, 2006



Source: Statistics Canada, Census of Population, 2006.

Montréal CMA: The proportion of workers in the city centre who knew French was relatively stable between 1996 and 2006

In the Montréal CMA, the proportion of sales and service workers who knew French in 2006 was the same as in 1996 at 96%. The situation was virtually the same in the city centre, though with a slightly larger decline in the knowledge of French between Saint-Laurent and Peel streets, where the majority of Montréal's city centre department stores, shopping centres, restaurants and bars are located. In that district, the proportion of sales and service workers who knew French was 93% in 2006, compared to 96% in 2001 (Table 2).

The decrease in the proportion of workers who knew French in that district was primarily due to the fact that a smaller percentage of the workers had French as their mother tongue. In 2006, 51% of sales and service workers in the district between Saint-Laurent and Peel streets were francophones, compared with 59% in 2001 (Table A.1). On the other hand, the propensity of allophone and anglophone workers to know French did not change appreciably between 2001 and 2006.

Profile of the workers who are most and least likely to know and use French at work in the Moncton, Greater Sudbury, Ottawa-Gatineau and Montréal CMAs

Younger workers are more likely to know French

Among anglophones outside Quebec, the level of English/French bilingualism is much higher for those aged 10 to 29 than any other age group.[11] This may be a result of the teaching of French as a second language in schools or the many French-immersion programs across the country. In Quebec, the vast majority of children whose mother tongue was neither French nor English (allophones) have been required to attend elementary and secondary school in French since Bill 101 was passed in 1997 (*Charter of the French Language*). Consequently, younger sales and service workers in the four CMAs are more likely than older workers to know French (Table 4).

The difference between the youngest and oldest workers is particularly pronounced in Moncton. In 2006, 71% of Moncton's sales and service workers between the ages of 15 and 24 knew French well enough to be able to carry on a conversation, compared with 40% of those aged 55 and over.

The prevalence of the knowledge of French also varies by occupation. In the four CMAs, roughly seven out of 10 sales and service workers were employed in just three occupations: retail salespersons and sales clerks, cashiers, and food and beverage servers. In Moncton, francophones were generally more likely to be able to use French if they went to a restaurant than if they spoke to a salesperson or a sales clerk in a store.

In central Montréal, the opposite was true, though the difference was much smaller: retail salespersons

Table 4 Knowledge of French of retail and client services workers by select CMAs and characteristics, 2006

	Census metropolitan areas								
	Moncton	Greater Sudbury	Ottawa-Gatineau			Montréal			
			Total	Quebec part	Ontario part	Total	Suburban rings	Island of Montréal	City centre
	percentage								
Occupation									
Retail salespersons and sales clerks†	57.5	38.9	52.3	97.2	41.8	96.7	99.0	94.7	94.6
Cashiers	54.0	45.1	54.8	99.2*	39.9	96.2	99.1	93.5*	90.4*
Food and beverages servers	70.5*	39.3	58.6*	98.9*	44.8	95.7*	98.8	93.6	91.0*
Hairstylists/beauticians	69.7*	37.3	49.5	99.0	34.9*	95.7*	98.9	92.5*	91.9
Grocery clerks and store shelf stockers	44.3*	46.3	49.6	95.5	32.4*	95.9	98.6	92.5*	95.3
Other sales occupations	67.0*	46.0	58.5*	97.0	46.8*	96.7	99.4	95.7*	95.1
Age group									
15 to 24 years †	70.6	50.1	59.4	99.3	47.8	98.7	99.6	97.9	97.3
25 to 34 years	65.3*	32.6*	51.8*	96.2*	39.7*	95.4*	98.4*	93.8*	93.5*
35 to 44 years	49.4*	34.4*	48.9*	97.3*	33.4*	94.5*	98.3*	91.9*	92.2*
45 to 54 years	51.3*	40.3*	45.4*	95.7*	30.2*	94.3*	98.5*	90.9*	86.7*
55 years and more	40.3*	32.9*	45.9*	95.2*	34.2*	93.4*	98.3*	89.5*	86.3*
Mother tongue[1]									
English	34.7*	23.8*	34.4*	81.4*	32.8*	87.9*	92.4*	86.8*	87.8*
French†	99.6	98.2	99.5	99.9	98.7	100.0	100.0	100.0	100.0
Other	44.7*	6.6*	28.8*	87.4*	23.4*	87.8*	91.6*	86.9*	85.7*
Immigrant status									
Immigrant †	43.2	2.0	27.0	86.8	22.0	86.2	90.6	85.1	85.1
Non immigrant	59.6*	42.8*	59.8*	98.5*	46.5*	98.7*	99.6*	97.7*	97.5*

† reference group
* statistically significant difference from reference group at $p < 0.05$
1. Persons whose mother tongue or one of the mother tongues is French.
Sources: Statistics Canada, Census of Population, 2006.

and sales clerks were slightly more likely to know French (95%) than were servers in restaurants (91%) (Table 4).

Most anglophones and allophones in sales and service occupations in Quebec know French

The propensity of anglophone sales and service workers to know French varied widely by location of employment. The proportion of anglophone workers who knew French was 33% on the Ontario side of the Ottawa-Gatineau CMA, compared with 81% on the Quebec side of that CMA and 88% in the Montréal CMA.

Allophones working in Quebec were about as likely as anglophones to know French: 87% on the Quebec side of the Ottawa-Gatineau CMA, 88% in the Montréal CMA.

In the Montréal CMA, workers whose mother tongue is Chinese are less likely to know French

The proportion of allophone workers who knew French varied substantially by mother tongue in the Montréal CMA (data not shown). Workers whose mother tongue was Spanish, Arabic, Italian or Portuguese were the most likely to know French (more than 95% in all cases). In contrast, 56% of sales and service workers whose mother tongue was Chinese knew French.

Summary

The vast majority of francophones are able to obtain service in their language since most of them live in communities where French is the dominant language. Outside the province of Quebec, the level of knowledge of French in retail and service outlets varies from area to area depending on, among other things, the proportion of francophones living in the area. In the province of Quebec, in 2006, the proportion of workers who knew French was almost 100% in most CMAs. In the Montréal CMA, this proportion was 99% in the northern and southern suburbs off the Island of Montréal, 95% in the city of Montréal and 91% in other municipalities on the Island of Montréal. In the Ottawa-Gatineau CMA, 98% of those who worked on the Quebec side could hold a conversation in French; the corresponding proportion was 41% on the Ontario side. Finally, in the two CMAs with the highest concentration of francophones outside Quebec, Moncton and Greater Sudbury, the proportions were 59% and 41% respectively.

Over time, the prevalence of the knowledge of French among sales and service workers has remained steady at the national level but varied somewhat at the provincial/territorial level—up in Newfoundland and Labrador, Prince Edward Island, New Brunswick and Yukon; slightly down in Ontario; unchanged in the other provinces and territories.

In the four CMAs analyzed in this article, the proportion of workers who knew French increased slightly in the Moncton area between 1996 and 2006 and remained relatively stable in Greater Sudbury. In the Ottawa-Gatineau CMA, it remained stable on the Quebec side of the river, but declined on the Ontario side. Over the same period, the proportion of sales and service workers who knew french remained relatively stable on the Island of Montréal, in the central area of the city, as well as in the suburbs.

In the Montréal CMA, most anglophone and allophone sales and service workers were able to carry on a conversation in French.

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1. In this article, persons who reported that French was one of the languages they learned first in childhood are considered francophones. A small number of respondents gave more than one answer to the question on the first language learned at home in childhood (for example, English and French, French and a non-official language, and so on). For the purposes of this article, any respondent who reports French as one of his or her first languages learned is deemed to be a francophone.
2. Marmen L. and Delisle, S. (2003). Healthcare in French outside Quebec *Canadian Social Trends*. No. 11-008-X. Ottawa: Minister of Industry. See also Blaser, C. 2009. *Health Care Professionals and Official-Language Minorities in Canada*. Statistics Canada, Catalogue no. 91-550-X, Ottawa: Minister of Industry.
3. This is the percentage according to the proportional distribution of multiple responses to the question on mother tongue. If we consider as francophones all of those who answered that French was their mother tongue or one of their mother tongues, as we did in this article, this proportion was 50.9 %.
4. On the Island of Montréal, these two municipalities ranked second and third in terms of population (respectively 48,930 in Dollard-Des Ormeaux and 31,395 in Côte-Saint-Luc). In 2006, the city of Montréal reached 1,620,693 people.
5. Statistics Canada. 2007. *The Evolving Linguistic Portrait, 2006 Census*. Catalogue no. 97-555-XIE. Ottawa: Minister of Industry.
6. Corbeil, J-P., Grenier, C. and Lafrenière, S. A. (2007). *Minorities Speak Up: Results of the Survey on the Vitality of Official-Language Minorities*. Statistics Canada, Catalogue no. 91-548-X. Ottawa: Minister of Industry.
7. In the Survey on the Vitality of Official-Language Minorities, the French-speaking population is composed of persons who:

   (a) have French as their mother tongue, alone or with another language;

   (b) have a non-official language as their mother tongue (we refer to them as allophones) and speak French but not English;

   (c) have a non-official language as their mother tongue, know both English and French and speak either a non-official language or French, alone or with another language, most often at home. In the rest of the study, the term used is Francophones, i.e., persons who reported French as their mother tongue (alone or, in some cases, with other languages).
8. Includes 35% who used English and French equally, 14% who used French much more than English, and 5% who used French only.

9. Office of the Commissioner of Official Languages. (2007). *Vitality Indicators for Official Language Minority, Communities 1: Francophones in Urban Settings - The Sudbury Francophone Community*. Catalogue no. SF31-92/1-3-2007, Minister of Public Works and Government Services Canada.

10. How much effort they made to obtain service in French is unknown.

11. Statistics Canada. 2007. *The Evolving Linguistic Portrait, 2006 Census*. Catalogue no. 97-555-X. Ottawa: Minister of Industry.

Table A.1 Knowledge of French of retail and client services workers and workers in other occupations, by select CMAs, 2006

	Retail and service workers		Workers of other occupations	
	Francophones[2] †	Use French at home[3]†	Francophones[2]	Use French at home[3]
	percentage			
Place of work (CMA[1])				
Moncton	37.4	38.8	40.2	41.2
Greater Sudbury	24.9	23.4	29.3*	26.9*
Ottawa-Gatineau	31.3	34.7	33.9*	37.2*
Ottawa-Gatineau (Que.)	86.2	93.4	74.3*	80.3*
Ottawa-Gatineau (Ont.)	15.5	17.8	25.3*	28.0*
Parliament Hill	19.7	22.4	36.9*	41.1*
Byward Market	17.6	19.2	28.3*	34.3*
Montréal	69.9	81.3	69.8	80.6*
Suburban rings of Montréal	87.4	93.3	86.1*	92.7*
Island of Montréal	55.9	71.7	61.8*	74.6*
City of Montréal (without the city centre)	61.7	77.2	63.8*	76.9
Other municipalities on the Island of Montréal	34.8	48.0	46.8*	58.9*
City centre	51.1	70.2	65.7*	78.1*
East of Saint-Laurent	69.9	83.9	79.5*	91.3*
Between Saint-Laurent and Peel	50.9	70.7	68.2*	80.2*
West of Peel	43.9	63.6	53.0*	66.7*

† reference group
* statistically significant difference from reference group at $p < 0.05$
1. Census metropolitan area.
2. Persons whose mother tongue or one of the mother tongues is French.
3. Uses French at home the most often or regularly.

Source: Statistics Canada, Census of Population, 2006.

Living with disability series

Life satisfaction of working-age women with disabilities

by Susan Crompton

Introduction

Canadian women in their prime adult years lead busy lives: they are raising families, working outside the home, volunteering and often caring for others. However, the proportion of women with disabilities is rising, from 15.7% in 2001 to 17.7% in 2006. If prime working-age women begin to experience activity limitations due to a long-term health problem or condition, the impact on them, their families and the wider community can be far-reaching.

Governments in many countries direct their disability policies toward ensuring the full participation of persons with disabilities in all aspects of society in order to maintain or improve their sense of happiness and well-being.[1] In Canada, the Minister of Human Resources and Skills Development has stated that the federal government's disability policy aims to provide persons with disabilities "with choices that will help them participate and succeed in their communities to improve their overall quality of life."[2]

Quality of life for persons with disabilities is influenced by many factors that may often interact in subtle ways. These factors can include the type and degree of disability, the ability to accomplish everyday tasks or activities, satisfaction with social support, presence of a spouse or partner, attitude and coping skills, self-esteem and gender.[3,4,5,6,7]

This article examines how Canadian women with disabilities aged 25 to 54 describe their level of life satisfaction across three main dimensions: daily activities, quality of relationships with family and friends, and health. Using the 2006 Participation and Activity Limitation Survey (PALS), we identify some of the elements that are associated with a greater sense of well-being. In order to focus on the social dimensions of this issue, we discuss women's satisfaction with their daily activities and the quality of their relationships first. Women's feelings about their health are addressed separately at the end of the article.

About the study population

The study population represents about 700,000 Canadian women aged 25 to 54 with disabilities. Just over 61% had physical-only disabilities—mainly chronic pain, agility or mobility difficulties—and about three-quarters of these women had more than one limitation. Fewer than 3% had a non-physical disability only, primarily a psychological condition or learning disability. About 36% had mixed disabilities, that is, non-physical disability in addition to a physical disability. (Given their small numbers, women with only non-physical disabilities are included with the mixed disabilities population in the analysis.) On average, women with physical-only disabilities had been living with their limitation for 12.6 years, and those with mixed disabilities for 17.6 years.

Just under 43% of women in the study population described their disability as being severe or very severe. A similar proportion (44%) did not participate in all the leisure activities they would have liked to because of the limitations imposed by their condition. About 18% received help with everyday tasks like doing housework, running errands and preparing meals.

Slightly more than one-half of the study population (53%) was between 45 and 54 years of age, with an average age of 43. Over one-third (35%) lived with a spouse and children, one-quarter (25%) lived with a spouse only, and 15% were lone parents. The remaining 25% had another type of living arrangement, and were living by themselves, with their parent(s) or with other people. Three-quarters (75%) had not completed postsecondary education, and 55% reported household income of less than $60,000 a year. Just over one-half (51%) had paid jobs outside

What you should know about this study

This article draws on results of the 2006 Participation and Activity Limitation Survey. The study population comprises just over 4,100 respondents representing about 700,000 women with disabilities aged 25 to 54. Respondents were classified as having a disability if they reported that they had difficulties with daily living activities, or that a physical or mental condition or health problem reduced the kind or amount of activities they could do. The answers to the disability questions are self-reported and therefore represent the respondent's perception of her situation. PALS did not collect data from individuals without disabilities and so it is not possible to compare the study population with its non-disabled counterpart.[1]

Definitions of terms and concepts

Type and effects of disability: this category includes information about the type of disability, the degree of severity of the disability, whether an individual receives care, and whether a woman with a disability is restricted in her leisure time activities.

Physical disabilities: includes hearing; seeing; mobility; agility; chronic physical conditions, including asthma and allergies, heart condition or disease, kidney disease, cancer, diabetes, epilepsy, cerebral palsy, spina bifida, muscular dystrophy, migraines, arthritis or rheumatism, paralysis of any sort, missing limbs or digits, complex medical care, other not specified.

Non-physical disabilities: includes speech/communication; learning; developmental; emotional/psychological; chronic non-physical conditions, including autism, fetal alcohol syndrome, ADD or ADHD, and Down syndrome.

Mixed disabilities: includes both physical and non-physical disabilities. In the analysis, this category includes the 3% of women with only non-physical disabilities who were too few to be studied separately.

Severity of disability: PALS constructed a scale measuring the overall severity of disability according to the intensity and frequency of the activity limitations reported by respondents. The disability severity scale is divided into four levels: mild, moderate, severe and very severe.

Receiving care: a woman gets help from someone else to prepare meals, do everyday housework, go to appointments, move around the house, and/or help with personal care, child care, or specialized nursing.

Non-participation in leisure activities: due to her condition, a woman does not participate in all the leisure activities she would like to.

Work and life stress: this category measures the effect of employment status and selected causes of stress.

Socio-demographics: this category measures the effect of age, education, household income, and living arrangements.

Social contact: this category measures the effect of a woman's involvement with people outside her household. It includes volunteer work done for organizations, number of close friends she can confide in, and frequency of contact with family and friends.

Life satisfaction indices

Respondents were asked to rate their level of satisfaction with five aspects of life. In order to reduce these questions to a more manageable number, we conducted a factor analysis that identified the questions that were most closely related and could be grouped into three general themes.[2] Each index uses a scale of 1 to 10, where 1 is "very dissatisfied" and 10 is "very satisfied." The three life satisfaction indices are:

Daily activities: satisfaction with job or with main activity (can include caring for children, looking after the home, going to school, being retired, and so on); satisfaction with the way leisure time is spent.

Relationships: satisfaction with relationship with family; satisfaction with relationship with friends.

Health: satisfaction with health.

The models

We used linear regression models for each satisfaction index, with the index score as the dependent variable (minimum=1, maximum=10). Coefficients were estimated through a weighted regression that used the PALS survey weights, with variance estimation calculated by survey bootstrapping. Coefficients are unstandardized; statistical significance was calculated at $p < 0.05$. (See Definitions of terms and concepts or Table 1 for the complete list of variables in the models.)

What you should know about this study (continued)

1. A 2003 U.S. study concluded that women with disabilities have lower self-esteem and higher social isolation than women without disabilities. (Nosek, M.A., Hughes, R.B., Swedlund, N., Taylor, H.B., and Swank, P. (2003). Self-esteem and women with disabilities. *Social Science and Medicine*. 56: 1737-1747.). A recent Dutch study found that although persons with disabilities had lower results on quality of life measures for perceived physical health, there was little difference between people with and without disabilities on measures of mental health and happiness. (Van Campen, C. and Iedema, J. (2007). Are persons with physical disabilities who participate in society healthier and happier? Structural equation modelling of objective participation and subjective well-being. *Quality of Life Research*. 16, 4: 635-645).
2. Although the health satisfaction question was related to the two questions included in the daily activities index, it was retained as an independent index because of its importance for women with disabilities.

the home. Most (84%) reported experiencing some stress in their lives, mainly because of their health or their work.

Three dimensions of life satisfaction are rated very differently

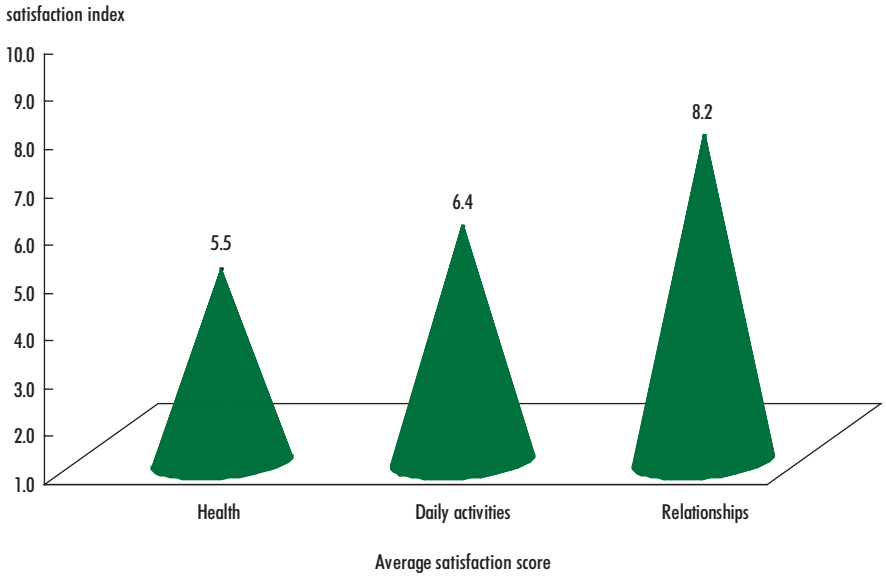
When working-age women with disabilities were asked to rate how satisfied they felt with their lives, the results were not unexpected. Half of them (50%) rated satisfaction with their health at 5.0 or more, for an average score of 5.5 out of 10. Almost 6 in 10 (58%) ranked satisfaction with their daily activities at at least 6.0, producing an average score of 6.4. They derived the greatest satisfaction from their relationships with family and friends, with 54% giving this dimension of their lives at least 8.0 out of 10, for an average score of 8.2 (Chart 1).

However, these overall averages mask the differences between women with disparate characteristics. For example, women with a severe-to-very-severe degree of disability had a significantly lower life satisfaction average for daily activities than women with mild-to-moderate disability (5.3 versus 7.1). Similarly, women whose condition prevented them from participating in their preferred leisure activities also recorded lower averages (5.6 versus 7.1). And women with mixed disabilities reported less enjoyment of family and friends, with an average rating of 7.6 for relationship satisfaction, compared with 8.5 for women with physical-only disabilities (Table A.1).

Clearly, some working-age women with disabilities derived less satisfaction from their daily activities and their relationships than others, but what factors may account for these differences? Does a woman have a lower score because she has non-physical disabilities, or because her leisure time activities are limited? And since previous research suggests that life satisfaction is also related to factors like employment and social support, what role may they play in the well-being of working-age women with disabilities?

To isolate the influence of different factors on the scores for each life satisfaction index, we developed multiple regression models. This allows us to see how individual factors contribute to the variation in women's index scores. In the remainder of this article, only the results of the regression models are reported. (See "What you should know

Chart 1 Women aged 25 to 54 with disabilities derive most satisfaction from their relationships with family and friends



Note: Index range: minimum = 1, maximum = 10.
Source: Statistics Canada, Participation and Activity Limitation Survey, 2006.

about this study" for details on the models.)

The type and effects of disability have the largest impact on satisfaction

Generally speaking, it is not a person's condition that causes the most difficulty, but the circumstances arising from it. Being able to adapt effectively and learning practical coping skills for dealing with everyday tasks are generally associated with better quality of life.[8,9,10]

According to the 2006 PALS, satisfaction with daily activities is strongly associated with the type and effects of disability. In fact, these disability characteristics account for about two-thirds of the difference in women's satisfaction scores on the index for daily activities.[11] Women with severe-to-very severe disabilities had a significantly lower satisfaction score (-1.1) than those with a mild-to-moderate degree of severity. Having mixed rather than physical-only disabilities was also negatively associated with satisfaction (-0.6), even when factors including severity were taken into account. Being unable to participate in her preferred leisure activities also reduced a woman's level of satisfaction with her daily activities (Model 1, Table 1).

When it comes to satisfaction with relationships, type of disability is significantly associated with index scores, but its effect varies depending on the degree of severity.[12] Physical-only disabilities did not change satisfaction scores regardless of severity; however, mixed disabilities were associated with significantly lower scores for both mild-to-moderate and severe-to-very severe degrees of disability (Model 2, Table 1).

Employment and stress have significant impact on satisfaction scores

Because paid employment provides social contact and a daily routine in addition to income, research generally finds a positive association between work and quality of life.[13,14]. The results for the daily activities index support these earlier findings, with about one-fifth of differences in women's scores attributable to work and life stressors (Model 1, Table 1).

When a woman with disabilities has paid employment, it significantly improves her score on the index for satisfaction with daily activities. The actual magnitude of the increase, however, depends on the severity of her disability. If they were not working, women with severe-to-very severe disabilities had significantly lower satisfaction scores (-1.1) than those with mild-to-moderate limitations, however, women who were employed had significantly higher scores regardless of their degree of severity.

The positive influence of paid employment is neutralized by the impact of stress. Worrying about issues such as health, work or finances reduced index scores by 0.6 to 1.1 points out of 10, depending on the main source of stress.

Although the workplace may provide social interaction for women with disabilities, employment status was not significantly associated with satisfaction scores on the relationship index. On the other hand, life stressors had a negative effect. When all other variables were held constant, satisfaction with relationships dropped for women who were worried about family, finances or work (Model 2, Table 1).

Socio-demographic factors not important to satisfaction with daily activities[15]

Having postsecondary education, higher income and being married are generally associated with better confidence and sense of self-worth, both of which tend to lead to a greater sense of well-being.[16,17] However, these basic socio-demographic characteristics were not significantly associated with satisfaction scores on the index for daily activities, even after controlling for the influence of other variables (Model 1, Table 1).

In comparison, relationship satisfaction was higher for women living with a spouse and children (+0.3), compared to those not living with a partner or children. Interestingly, living with a spouse only or with children only did not influence women's index scores.[18]

Social contact improves satisfaction with both relationships and daily activities

Having more friends and relatives generally makes people happier, and they are happier still when they have a larger social network.[19] The PALS models show that social contact accounts for over one-fifth of the differences in women's scores on the relationship index and for about one-tenth on the daily activities index.

All other factors being held constant, women had higher satisfaction scores for daily activities if they had more than two close friends in whom to confide (+0.5); if they visited family or friends frequently (+0.4); and if they did unpaid volunteer work for organizations (+0.3) (Model 1, Table 1).

Satisfaction scores for the relationships index also significantly improved when women had good friends (+0.4) and spent time visiting with friends and family (+0.3). After controlling for other variables, though, volunteer work was not significantly associated with higher scores on the relationship index.

Extent of disability effects primarily associated with health satisfaction

The health satisfaction of working-age women with disabilities is strongly related to the impairment and its effect on everyday life. Compared to women with mild-to-moderate disabilities, those with severe or very severe disabilities rated their health satisfaction significantly lower (-1.1) once all other factors were controlled for. Being unable to participate in her preferred leisure activities

reduced a woman's index score by a similar amount (-1.1). Having mixed disabilities and receiving help with everyday activities also had a negative association. Together, these four factors accounted for about 80% of the differences in women's scores on the health satisfaction index[20] (Model 3, Table 1).

Only three other factors in the regression model were significantly associated with health satisfaction. Anxiety about their health had an important influence, as women who identified health as their main cause of stress had lower scores than women who reported no stress (-1.4). On the other hand, having a paid job produced higher index scores (+0.5) once all other factors had been controlled for. And living with a spouse and children also improved women's health satisfaction scores (+0.3).

Summary

Women with disabilities aged 25 to 54 expressed a very high degree of satisfaction with the quality of their relationships with family and friends. They reported receiving less satisfaction from their daily activities and the least amount from their health status.

The effects of disability have the largest influence on women's sense of well-being. The severity of

Table 1 Regression models for satisfaction scores, women with disabilities aged 25 to 54

	Model 1 Daily activities	Model 2 Relationships	Model 3 Health
	coefficients		
Intercept (constant)	7.30	8.14	6.60
Effects of disability			
Severity of disability			
Mild to moderate †	..	..	..
Severe to very severe	-1.07*	0.06	-1.07*
Type of disability			
Physical only †	..	..	..
Mixed	-0.58*	-0.44*	-0.32*
Receive help due to disability			
Yes	-0.21	-0.08	-0.48*
No †	..	..	..
Condition prevents participation in more leisure activities			
Yes	-0.82*	-0.16	-1.08*
No †	..	..	..
Work and life stressors			
Works in paid employment			
Yes	0.49*	0.07	0.51*
No †	..	..	..
Major cause of stress in life			
Little or no stress †	..	..	..
Work	-0.97*	-0.39*	-0.28
Finances	-0.66*	-0.52*	-0.51
Family	-0.58*	-0.82*	-0.11
Health	-1.08*	-0.14	-1.43*
Other, including school	-0.86*	-0.20	-0.46
Socio-demographic characteristics			
Age group			
25 to 34 †	..	..	..
35 to 44	-0.23	-0.07	-0.10
45 to 54	-0.29	0.15	-0.35
Living arrangement			
With spouse and children	0.23	0.32*	0.30*
With spouse only	0.08	-0.05	0.12
With children only	-0.14	0.23	0.16
Other, including alone, with parents †	..	..	..
Postsecondary education			
Yes	-0.06	-0.20	0.00
No †	..	..	..
Household income			
Under $60,000 †	..	..	..
$60,000 to $89,999	-0.15	-0.12	-0.05
$90,000 or more	-0.08	-0.07	-0.07
Social contact			
Volunteer in an organization			
Yes	0.33*	0.13	0.15
No †	..	..	..
Number of close friends to confide in			
Less than 3 †	..	..	..
3 or more	0.47*	0.44*	0.26
Phone contact with family or friends			
Every day	-0.04	0.20	-0.07
Less than every day †	..	..	..
Visits with family or friends			
At least once a week	0.38*	0.30*	0.31
Less than once a week †	..	..	..
Interaction effects			
Mixed disabilities x Severe to very severe	...	-0.55*	...
Employed x Severe to very severe	0.85*	...	...

† reference group
* statistically significant difference from reference group at $p < 0.05$
Source: Statistics Canada, Participation and Activity Limitation Survey, 2006.

disability and being prevented from participating in leisure activities diminished their satisfaction with daily activities and health; the type of disability was negatively associated with the quality of their relationships.

Stress also reduced life satisfaction. Being worried about their health was an important influence on health and daily activities; problems with family and finances also reduced satisfaction with daily activities and with relationships.

Nevertheless, a number of factors had a positive impact on women's life satisfaction scores. Having paid employment significantly improved women's feelings about their health and daily activities. Living with a spouse and children was also positively associated with higher satisfaction on both the relationship and health indices.

Social contact had a significant influence on the well-being of working-age women with disabilities. Having at least three close friends and visiting frequently with family and friends raised satisfaction with daily activities and relationships, while women who did volunteer work also felt better about their daily activities.

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1. Van Campen, C. and Iedema, J. (2007). Are persons with physical disabilities who participate in society healthier and happier? Structural equation modelling of objective participation and subjective well-being. *Quality of Life Research*. 16, 4: 635-645.
2. Hon. Diane Finley. (2009). *Advancing the Inclusion of People with Disabilities 2009*. Message from the Minister. Ottawa: Human Resources and Skills Development Canada. p. i.
3. Miller, A. and Dishon, S. (2006). Health-related quality of life in multiple sclerosis: The impact of disability, gender and employment status. *Quality of Life Research*. 15, 2: 259-271.
4. Friedman, L.C., Brown, A.E., Romero, C., Dulay, M.F., Peterson, L.E., Wehrman, P., Whisnand, D.J., Laufman, L. and Lomax, J. (2005). Depressed mood and social support as predictors of quality of life in women receiving home health care. *Quality of Life Research*. 14, 8: 1925-1929.
5. Moin, V., Duvdevany, H. and Mazor, D. (2009). Sexual identity, body image and life satisfaction among women with and without physical disability. *Sexuality and Disability: A Journal Devoted to the Psychological and Medical Aspects of Sexuality in Rehabilitation and Community Settings*. 10.1007/s11195-009-9112-5.
6. Goretti, B., Portaccio, E., Zipoli, V., Hakiki, B., Siracusa, G., Sorbi, S., and Amato, M.P. (2009). Coping strategies, psychological variables and their relationship with quality of life in multiple sclerosis. *Neurological Science*. 30: 15-20.
7. Tam, S-F., Man, D.W.K., Li, E.P-Y., and Ng, J.Y.Y. (2004). Exploring self-esteem as subjective quality of life of people with different disability types. *Quality of Life Research*. 13, 9: 1543.
8. Nosek, M.A., Hughes, R.B., Swedlund, N., Taylor, H.B. and Swank, P. (2003). Self-esteem and women with disabilities. *Social Science and Medicine*. 56: 1737-1747.
9. Goretti et al. (2009).
10. Hallberg, L.R.-M., Hallberg, U. and Kramer, S.E. (2007). Self-reported hearing difficulties, communication strategies and psychological general well-being (quality of life) in patients with acquired hearing impairment. *Disability and Rehabilitation*. 30,3 : 203-212.
11. The block of variables measuring the effects of disability account for 68% of the differences in scores for the daily activities index (R-squared=0.31). Results of nested regressions (not shown).
12. The effects of the disability block of variables contributed about 50% to the differences observed in women's scores on the relationship index (R-squared=0.16). Results of nested regression (not shown.)
13. Twork, S., Wirtz, M., Schipper, S., Klewer, J., Bergmann, A. and Kugler, J. (2007). Chronical illness and maternity: life conditions, quality of life and coping in women with multiple sclerosis. *Quality of Life Research*. 16: 1587-1594.
14. Miller and Dishon (2006).
15. Socio-demographic characteristics account for 10% of differences in relationship scores, and less than 2% of differences in daily activities scores. Results of nested regressions (not shown).
16. Wilkinson, R. and Pickett.K. (2009). *The Spirit Level: Why More Equal Societies Almost Always Do Better*. London: Penguin Group. Pages 31-45, 63-72.
17. Nosek et al. (2003).
18. A recent study of women with disabilities found that living with a partner improved their life satisfaction only if sexual satisfaction was higher. Moin, Duvdevany and Mazor (2009).
19. Christakis, N.A. and Fowler, J.H. (2009). *Connected: The Surprising Power of Our Social Networks and How They Shape Our Lives*. New York. Little, Brown and Company. 33-60.
20. The block of variables comprising the effects of disability accounts for 80% of the differences in scores for the health satisfaction index (R-squared=0.35). Results of nested regressions (not shown.)

Table A.1 Average life satisfaction score for women with disabilities aged 25 to 54, 2006

	Daily activities	Relationships	Health
	average score (maximum = 10)		
Overall average	**6.4**	**8.2**	**5.5**
Effects of disability			
Severity of disability			
Mild to moderate †	7.1	8.5	6.5
Severe to very severe	5.3*	7.8*	4.1*
Type of disability			
Physical only †	6.9	8.5	6.0
Mixed	5.7*	7.6*	4.8*
Receive help due to disability			
Yes	6.1	8.1	5.0*
No †	6.5	8.2	5.6
Condition prevents participation in more leisure activities			
Yes	5.6*	8.0*	4.4*
No †	7.1	8.4	6.4
Work and life stressors			
Works in paid employment			
Yes	7.0*	8.3	6.2*
No †	5.7	8.0	4.8
Major cause of stress in life			
Little or no stress †	7.3	8.7	6.3
Work	6.8	8.3	6.4
Finances	6.3*	7.8*	5.4*
Family	6.8	7.8*	6.1
Health	5.1*	8.1*	3.7*
Other, including school	6.3*	8.3	5.6
Socio-demographic characteristics			
Age group			
25 to 34 years old †	6.9	8.1	6.1
35 to 44 years old	6.4*	8.1	5.7
45 to 54 years old	6.3*	8.3	5.3*
Living arrangement			
With spouse and children	6.6	8.5*	5.8
With spouse only	6.4	8.2	5.5
With children only	6.1	7.7	5.4
Other arrangement, including alone †	6.3	8.0	5.2
Postsecondary education			
Yes	6.5	8.2	5.7
No †	6.4	8.2	5.4
Household income			
Under $60,000 †	6.3	8.0	5.4
$60,000 to $89,999	6.5	8.4*	5.7
$90,000 or more	6.6	8.4	5.7
Social contact			
Volunteer in an organization			
Yes	6.8*	8.4	5.9*
No †	6.1	8.1	5.3
Number of close friends to confide in			
Less than 3 †	5.7	7.7	5.0
3 to 5	6.5*	8.1*	5.6*
More than 5	6.9*	8.8*	5.9*
Phone contact with family or friends			
Every day	6.5	8.4*	5.6
Less than every day †	6.3	7.9	5.5
Visits with family or friends			
At least once a week	6.8*	8.4*	5.9*
Less than once a week †	6.0	8.0	5.1

† reference group

* statistically significant difference from reference group at $p < 0.05$

Source: Statistics Canada, Participation and Activity Limitation Survey, 2006.

Precautions taken to avoid victimization: A gender perspective

by Leslie-Anne Keown

Introduction

While the vast majority of Canadians are satisfied with their personal safety from crime (94%),[1] many take precautions to protect themselves from becoming a victim of crime and some experience fear of crime. Past research has shown that fear of crime and use of precautions are not equal between men and women nor used equally among all age groups.[2,3,4] Additionally, it is likely that perceptions and fear of crime, as well as the use of precautions to avoid becoming a victim of crime differ between those living in urban and rural areas[5,6] and even between those living in urban areas of different sizes.[7,8]

Using the 2004 General Social Survey (GSS) on criminal victimization, this study examines differences in perceptions of crime, fear of crime and use of precautionary behaviours to avoid victimization for the prime working-age population (25 to 54 years) living in Census Metropolitan Areas (CMAs) in Canada (For concepts and definitions see "What you should know about this study").[9] Perceptions considered include perceptions of neighbourhood crime and measures of fear of crime. Precautions taken to avoid victimization include behaviours that limit some forms of day-to-day activity. These include staying home at night to avoid being a victim of crime (avoidance) and habitual behaviours which are engaged in to reduce exposure to crime and thus limit the possibility of victimization, for example, locking car doors (routine precautions).

The GSS also asks respondents about their use of lifetime protective measures such as installing new locks or burglar alarms and getting a dog for protection. Previous research has noted that there are differences

What you should know about this study

This article is based on data collected by the 2004 General Social Survey (GSS). The GSS is an annual survey that monitors changes and emerging trends in Canadian society. The information was collected in 2004 through Cycle 18 of the General Social Survey (GSS) on victimization. This cycle collected information on Canadians' experience of victimization and public attitudes towards crime, police, courts, prison and parole. The target population of the 2004 GSS included all people aged 15 and over, except full-time residents of the Yukon, Nunavut and the Northwest Territories. Data were collected each month from January to December 2004. Over this period, approximately 24,000 individuals were successfully interviewed.

CMA: Census Metropolitan Area. A CMA is an area consisting of one or more adjacent municipalities situated around a major urban core. A CMA must have a population of at least 100,000 and the urban core must have a population of at least 50,000. The CMAs represented here are based on geography in the 2001 Census. The CMAs included were St. John's, Halifax, Saint John, Chicoutimi-Jonquière, Québec, Sherbrooke, Trois-Rivières, Montréal, Ottawa-Hull, Kingston, Oshawa, Toronto, Hamilton, St. Catharines-Niagara, Kitchener, London, Windsor, Greater Sudbury, Thunder Bay, Winnipeg, Regina, Saskatoon, Calgary, Edmonton, Abbotsford, Vancouver and Victoria.

This article examines only respondents who resided in CMAs and were of the core working age (25 to 54). This resulted in a sample of 8,095 respondents representing approximately 9.6 million Canadians.

between men and women in the use of lifetime protective measures, but these are less pronounced than the gender differences seen in precautions that limit some forms of day-to-day activity.[10] This is likely because lifetime measures are more focused on activities related to household experiences than on an individual's action.

More specifically, this article focuses on determining whether there are differences in the perceptions of fear of crime and the use of precaution measures between men and women in the study population, and examines whether any differences persist once other factors (including fear of crime and perceptions of the presence of crime) that may influence the use of precautions have been taken into account.

CMA versus non-CMA

How do those residing in CMAs differ in perception of crime, fear of crime and use of precautions to avoid victimization from those living outside CMAs?

There are considerable differences between individuals of the core working age (25 to 54 years) residing in CMAs and those residing outside CMAs with respect to perceptions of neighbourhood crime, fear of crime, and use of precautionary behaviours that limit day-to-day activity.

In 2004, those residing in CMAs were more likely to have experienced victimization (33%) than those residing outside CMAs (27%). They were also more likely to report that crime is higher in their neighbourhood compared to other neighbourhoods and to believe that crime in their neighbourhood had increased in the last five years.

Those residing in CMAs were also more likely to report fear of crime. For example, 15% of those residing in CMAs reported feeling unsafe walking alone at night in their neighbourhood compared to 9% among those living outside CMAs. Those residing in CMAs also reported higher levels of worry when they were home alone (22%) than those residing outside CMAs (16%).

With regard to the use of precautionary behaviours, those living in CMAs were more likely to use more precautionary behaviours. About 10% of those residing in CMAs stated they used an avoidance precaution (staying home) and 77% reported using at least one routine precaution. For those residing outside CMAs, 6% reported using an avoidance precaution and 66% reported using at least one routine precaution.

The study population

The study population in this group consists of the core working-age population (those between the ages of 25 and 54)[11] living in CMAs. This results in a sample of 8,095 people representing approximately 4.8 million women and 4.8 million men living in Canada.

The age group for this study was chosen because it represents a significant portion of the population and this age group may exhibit different fear of crime and perceptions than young adults or older individuals. For example, the core working-age population (25 to 54) was less likely to have experienced victimization in the last 12 months than their younger counterparts (31% versus 43%). However, they were more likely to have self-reported victimization than their older counterparts (31% versus 14%). The working-age population was also less likely than older Canadians to have used a precaution to protect themselves from victimization (data not shown).

Different patterns are also seen when those residing in CMAs are compared to those living elsewhere (See "CMA versus non-CMA" for details). For these reasons, this article focuses on the core working-age population of Canadians living in CMAs.

Do men and women differ in their perception of the amount of crime around them?

Before examining the specific precautions taken to avoid becoming a victim of crime, it is necessary to first examine whether men and women differ in the amount of crime they perceive around them. For example, if their perception of crime differs, then it might be expected that men and women would react differently to crime, with the group perceiving more crime reacting more strongly (either with regard to fear or precautionary behaviours).[12,13,14,15] However, there is only a slight difference in how the sexes perceive the amount of crime around them (Table 1).

In 2004, 35% of women and 32% of men perceived that crime in their neighbourhood had increased in the last five years. This three percentage point difference is statistically significant but relatively small. Men and women did not differ about whether they believed that crime in their neighbourhood was higher when compared to other neighbourhoods, with just over 1 in 10 saying that crime in their neighbourhood was higher than in other neighbourhoods.

Do men and women differ in their fear of perceived crime?

Although men and women did not differ substantially in how much crime they perceived; there were significant differences between men and women

Table 1 Perceptions of crime among 25 to 54 year olds living in a CMA, by gender, 2004

	Total	Women	Men	Odds of women compared to men
		percentage		odds ratio
Neighbourhood crime is higher compared to other neighbourhoods in Canada	11	11	12	0.92
Crime in your neighbourhood has increased in the last 5 years	33	35	32	1.16*

* statistically significant difference between men and women at $p < 0.05$
Source: Statistics Canada, General Social Survey, 2004.

Table 2 Perceptions of personal safety among 25 to 54 year olds living in a CMA, by gender, 2004

	Total	Women	Men	Odds of women compared to men
		percentage		odds ratio
Feel somewhat or very unsafe walking alone after dark	15	24	7*	4.23*
Somewhat or very worried when home alone in the evening	22	30	15*	2.49*

* statistically significant difference between men and women at $p < 0.05$
Source: Statistics Canada, General Social Survey, 2004.

with respect to their fear of crime (Table 2). It is evident from the data that women were more fearful than men. In 2004, 24% of women of core working age living in CMAs said they felt somewhat unsafe or very unsafe walking alone after dark. In contrast, only 7% of men felt this way. Stated another way, the odds of a woman feeling unsafe walking alone after dark were 4.2 times higher than those of a man.

Another measure of fear is whether a person feels worried when home alone. Again, differences between the sexes are marked: twice as many women (30%) as men (15%) were somewhat or very worried when home alone in the evening.

Do men and women differ in their avoidance behaviours?

While women and men had similar feelings about their sense of neighbourhood crime, fear responses varied significantly between the sexes. This same pattern of large differences between men and women is also seen when their use of precautions taken to avoid victimization, which can limit day-to-day activity, is examined. One type of precautionary practice is avoidance behaviour. Avoidance behaviour reflects the restrictions individuals place on their own movements in order to protect themselves from crime.[16,17,18,19] This restriction of activity has important societal consequences because it limits personal freedom and also because it can change urban interactions and patterns of mobility in, for example, public places like shopping areas and community gathering places.[20]

The GSS measures avoidance behaviours by asking whether individuals stay home at night because they are afraid to go out alone. While only 3% of men in the study population avoided going out alone at night, 17% of women engaged in this behaviour as a means to avoid becoming a victim of crime (Chart 1). In other words, the odds of a woman between the ages of 25 and 54 practicing avoidance behaviour to protect herself from crime were 7.0 times higher than that of a man in the same age group.

Therefore, while it appears that men and women largely agree on the amount of crime they perceive in their neighbourhoods, there are large differences between the sexes in their fear of crime. Not surprisingly then, there are important differences for men and women in their avoidance behaviour.

Do men and women differ in the routine precautions taken to avoid being a victim of crime?

In addition to avoidance behaviours, precautions that limit day-to-day activity can involve behaviours adopted habitually to protect oneself from becoming a victim, usually when away from home.[21] These are called routine precautions. Similar to avoidance behaviours, the use of routine precautions can have an impact on personal freedom but, perhaps more importantly, they serve to protect the individual.

The GSS asked respondents if they used four routine precautions. As was the case with avoidance as a precautionary behaviour, women were much more likely than men to use routine precautions. Indeed, the odds of a woman using a routine precaution were 5.7 times higher than the odds of a man. In other words, among those aged 25 to 54 living in CMAs, 91% of women used at least one routine precaution compared to 64% of men (Table 3).

Gender differences were also found in each of the four separate behaviours. The least common precautionary behaviour for both men and women was carrying something for self-defence, with 21% of women and 8% of men reporting that they routinely engaged in this activity. And

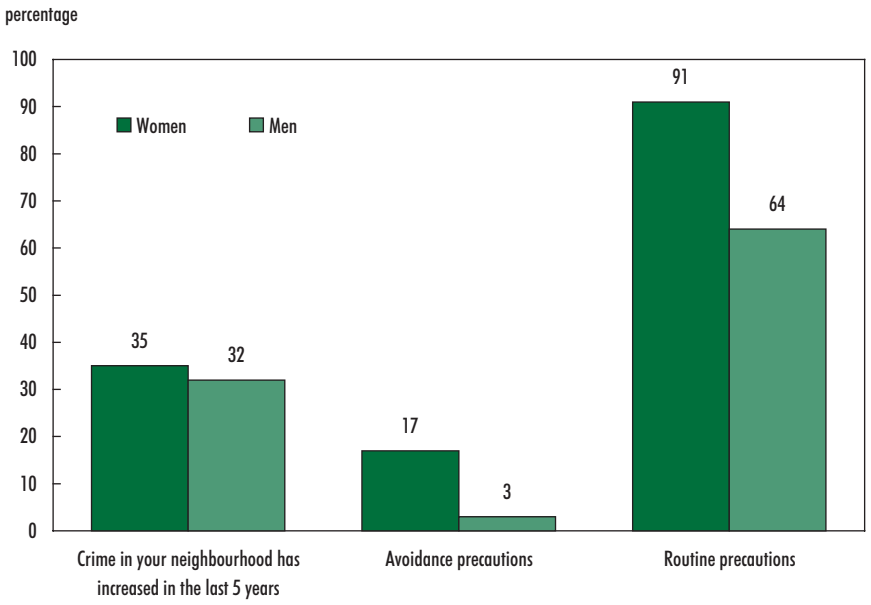
Table 3 Routine precautions taken to avoid victimization among 25 to 54 year olds living in a CMA, by gender, 2004

	Total	Women	Men	Odds of women compared to men
		percentage		odds ratio
Used any of the routine precautions below	**77**	**91**	**64***	**5.73***
Carried something to defend yourself or alert other people	14	21	8*	3.05*
Locked the car doors for personal safety when alone in the car	62	80	44*	4.98*
Checked the back seat for intruders when alone and returning to your car	47	64	31*	4.03*
Planned your route with safety in mind	47	60	34*	2.98*

* statistically significant difference between men and women at $p < 0.05$

Source: Statistics Canada, General Social Survey, 2004.

Chart 1 Women and men perceive similar amounts of crime but their use of precautions differs



Source: Statistics Canada, General Social Survey, 2004.

while about 60% of women planned their route with safety in mind, this was the case for 34% of men. Women were also much more likely than men to use car-related precautionary behaviours. For example, women were 4 to 5 times more likely than men to lock their car doors and to check the back seat of their vehicle when alone.

The 2004 General Social Survey data indicate that there are important differences between men and women with respect to the avoidance and routine precautionary behaviours they used to protect themselves from victimization and to help with fear of crime, while there are no substantive differences in neighbourhood crime perceptions (Chart 1). However, it is possible that part of the gender difference in precautionary behaviours could be explained by other influences such as age, income, education, fear, and crime perceptions. The following section examines these intervening factors.

Do gender differences in precautionary behaviours remain once other factors are taken into account?

In order to understand whether gender differences remain important once other characteristics and factors have been accounted for, logistic regression was used. In logistic regression models, it is possible to see what unique contribution each factor makes toward understanding precautionary behaviours while controlling or removing the influence of other variables. Avoidance behaviours and routine precaution behaviours are examined in separate models.[22,23]

Past research has found that a number of other influences may explain differences in precautionary or avoidance behaviours between women and men.[24,25,26] These influences include demographic characteristics such as age, education and income, as well as neighbourhood perceptions of crime, perceptions of fear, and victimization experiences (See "Does victimization influence precaution use?" for details).

The model developed here shows that while many of these other influences were important (for example, perceptions of crime and fear, visible minority status, and whether people owned their dwellings), they did not reduce the influence of gender (Table 4). Examining avoidance behaviours by controlling for sex alone shows that the odds of a woman in the study population engaging in avoidance behaviour (staying home at night) were 7.0 times higher than the odds of a man. Even when other influences are added to the model, the odds ratio remains significantly

Does victimization influence precaution use?

Past research has shown that precaution use and criminal victimization may be linked.[1] This leads to the question of whether there are differences between men and women with respect to the relationship between precaution use and victimization.[2] Men and women aged 25 to 54 residing in CMAs did not differ in self-reported victimization. The 2004 GSS found that one in three individuals had reported some form of victimization (including victimization by a spouse or ex-spouse) in the last 12 months. Further details on victimization can be found in the *Juristat* entitled "Criminal victimization in Canada, 2004" by Gannon and Mihorean (2005), Statistics Canada Catalogue no. 85-002-XPE, Vol. 25. no. 7.

The overall model results indicate that there is a relationship between self-reported victimization and routine precaution use. Those who reported victimization were 1.3 times more likely to report using a routine precaution than those who reported no victimization in the last 12 months. There was no relationship between using an avoidance precaution (staying at home) and victimization once other factors were controlled for. However, there was no indication that the influence of self-reported victimization on precaution use was different for men and women (See Table A.1 for model results).

1. Gannon, M. and Taylor-Butts, A. (2006). *Canadians' Use of Crime Prevention Measures*. Statistics Canada Catalogue no. 85F0033MIE – No. 12.

   AuCoin, K. and Beauchamp, D. (2007). Impacts and consequences of victimization, GSS 2004. *Juristat*. Statistics Canada Catalogue no. 85-002-XIE, Vol. 27, no. 1.

2. Respondents reported what precaution and avoidance behaviours they used but did not indicate whether these measures were implemented before or after their victimization.

Table 4 Comparison of odds ratios for gender and precaution use

	Odds of women compared to men	
	odds ratio unadjusted	odds ratio adjusted
Avoidance behaviour	7.0	6.8
Routine precautions	5.7	5.5

* statistically significant difference between unadjusted and adjusted odds ratio at $p < 0.05$

Note: Full model results are presented in Table A.1.

Source: Statistics Canada, General Social Survey, 2004.

higher for women than for men. Even after controlling for other confounding influences, women aged 25 to 54 living in CMAs were 6.8 times more likely to engage in avoidance behaviours than their male counterparts.

A similar picture is seen when routine precautions are considered. The odds of a woman using a routine precaution were 5.7 times higher than the odds of a man when no other influences were taken into account. When the model was used to control for other influences, women continued to have significantly higher odds of engaging in routine precautionary measures compared to men, and the influence of gender was not significantly changed by controlling for other factors in the model.

These results illustrate that even after other influences have been controlled for, gender remains an important element in explaining the differences in precautionary behaviours that limit forms of day-to-day activity. Research suggests the gender difference in precautionary behaviours persists because women feel more vulnerable than men when they are away from their place of residence.[27,28,29,30,31,32,33]

Summary

This article has shown that men and women between the ages of 25 and 54 and living in CMAs differ in their use of precautionary behaviours to protect themselves from victimization. These precautionary behaviours often limit some form of their day-to-day activities. While women and men generally perceive the same amount of crime around them, their use of precautionary behaviours is very different. Women were much more likely than men to be fearful of crime and engage in precautionary behaviours including avoidance behaviours and taking routine precautions. This gender gap was persistent and remained substantially unchanged even when a variety of other characteristics including fear of crime were taken into account.

Leslie-Anne Keown is a social science researcher with *Canadian Social Trends*.

1. Gannon, M. (2005). *General Social Survey on Victimization, Cycle 18: An Overview of the Findings*. Statistics Canada Catalogue no. 85-565-XIE.
2. Ibid.

3. Gannon, M. and Taylor-Butts, A. (2006). *Canadians' Use of Crime Prevention Measures*. Statistics Canada Catalogue no: 85F0033MIE – No. 12.

4. Keown, L.A. (2007a). *Personal Crime Precautions in Canada (1993-2004): An Exploration*. Unpublished Doctoral Dissertation. University of Calgary. Calgary, Alberta.

5. Gannon, M. (2005).

6. Gannon, M. and Taylor-Butts, A. (2006).

7. Keown, L.A. (2007b). *Incorporating Place into Research: An Example Using Personal Crime Precautions in Canada*. Statistics Canada Socio-Economic Conference. Ottawa, ON. May 28.

8. Keown, L.A. (2007a).

9. The sample includes only those with non-missing information on all of the included variables in the multivariate analysis. This is to allow for comparison between the unadjusted and adjusted odds ratios.

10. Gannon, M. and Taylor-Butts, A. (2006).

11. The Labour Force Survey defines the core working age as 25 to 54 years.

12. Holloway, W. and Jefferson, T. (1997). The risk society in an age of anxiety: Situating fear of crime. *British Journal of Sociology*. 48(2): 255-266.

13. Keown, L.A. (2001). *Perceived Risk of Victimization: A Canadian Perspective*. Unpublished Master's Thesis. University of Calgary. Calgary, Alberta.

14. Ferraro, K.F. (1995). *Fear of Crime: Interpreting Victimization Risk*. Albany, NY. State University of New York Press.

15. Garland. D. (2001). *The Culture of Control: Crime and Social Disorder in Contemporary Society*. Oxford. Oxford University Press.

16. Keown, L.A. (2007a).

17. Gannon, M. and Taylor-Butts, A. (2006).

18. Ferraro, K.F. (1995).

19. Miethe, T.D. (1995). Fear and withdrawal from urban life. *Annals of the American Academy of Political and Social Science*. 539 (May): 14-27.

20. Ibid.

21. Gannon, M. and Taylor-Butts, A. (2006).

22. All models were checked using seemingly unrelated estimation to see if there were interactions between gender and the other variables in the model. An omnibus test indicated that the models for men and women were not different.

23. Models run on each of the four routine precautions produced similar results to the omnibus model presented here. Therefore, the omnibus model is presented. Further information on the individual models can be obtained from the author.

24. Gannon, M. and Taylor-Butts, A. (2006).

25. Skogan W. and Maxfield, M. (1981). *Coping with Crime: Individual and Neighbourhood Reactions*. Beverly Hills, CA. Sage Publications.

26. Gilchrist, E., Bannister, J. and Ditton, J. (1998). Women and the fear of crime: Challenging the accepted stereotype. *The British Journal of Criminology*. 38(2): 283-298.

27. Sutton, R.M. and Farall, S. (2005). Gender, socially desirable responding and fear of crime. *British Journal of Criminology*. 45: 212-224.

28. Keown, L.A. (2007a).

29. Ferraro, K.F. (1995).

30. Gilchrist, E., Bannister, J. and Ditton, J. (1998).

31. Gordon, M.T., LeBailly, R.K. and Riger S. (1982). Coping with urban crime: Women's use of precautionary behaviours. *American Journal of Community Psychology*. 10: 369.

32. Killias, M. and Cleric, C. (2000). Different measures of vulnerability in their relation to different dimensions of fear of crime. *The British Journal of Criminology*. 40(3): 437-450.

33. Sacco, V.F. (1990). Gender, fear, and victimization: A preliminary application of power-control theory. *Sociological Spectrum*. 10(4): 485-506.

Table A.1 Logistic regression models for avoidance and routine precautions presenting odds ratios for 25 to 54 year olds living in a CMA[1]

	Avoidance precaution	Routine precaution
	odds ratio	
Sex		
Male †	1.0	1.0
Female	6.8*	5.5*
Perceptions of crime		
Crime in your neighbourhood has increased in the last 5 years		
No †	1.0	1.0
Yes	1.6*	1.4*
Neighbourhood crime is higher compared to other areas		
No †	1.0	1.0
Yes	1.7*	1.5*
Perceptions of fear and safety		
Worried when home alone		
No †	1.0	1.0
Yes	3.4*	2.7*
Victimization		
Self-reported vicitimization in the last 12 months (including spouse/ex-spouse events)		
No †	1.0	1.0
Yes	1.1	1.3*
Demographics		
Age (years)	1.01*	1.0
Postsecondary education		
No †	1.0	1.0
Yes	0.7*	1.0
Presence of child under 19 in the household		
No †	1.0	1.0
Yes	1.0	0.8*
Married/common-law		
No †	1.0	1.0
Yes	1.4*	1.1
Member of a visible minority		
No †	1.0	1.0
Yes	2.3*	1.3*
Household income		
$0 to $29,999	3.2*	1.1
$30,000 to $49,999	3.3*	1.2
$50,000 to $79,999	3.3*	1.3
$80,000 to $99,999	2.2*	1.4
$100,000 and over †	1.0	1.0
Income not stated	3.0*	1.1
Housing characteristics		
Own residence		
No †	1.0	1.0
Yes	0.7*	1.3*
Length of residence in the neighbourhood		
Less than 1 year	0.9	1.0
1 year to less than 5 years	1.0	1.3
5 to 10 years	1.0	1.0
More than 10 years †	1.0	1.0

† reference group
* statistically significant difference at $p < 0.05$
1. Census Metropolitan Area.
Source: Statistics Canada, General Social Survey, 2004.

The Census and the evolution of gender roles in early 20th century Canada

by Derrick Thomas

Introduction

Canadian society has changed in many ways over the past century. Gender roles and relations are among the areas that have undergone the most profound transformations. Today, legal and social equality between the sexes are explicit and virtually unquestioned societal goals. Few young people today would recognize the Canada of 1911 or 1921. There were pronounced social distinctions between men and women which prevailed a mere generation ago. The Census of Canada has been part of this history and has evolved along with society generally. Early census collections and reports largely reflected the social context of their time.

Beyond the physical differences between men and women and their different reproductive functions are separate sets of socially-determined behavioural norms and performance standards attached to each gender. For example, these norms may dictate dress or acceptable occupations. Social conventions may also set down different roles within the family or establish a hierarchy with respect to the sharing of work, resources and decision-making in the household and more broadly.

Evidence of the social construction of gender roles can be seen by examining these roles across societies or across time. The variability seen suggests that roles are not innate. They must be established and maintained via a more or less general agreement. In Canada this consensus is thought to be evolving, at least over the longer term, from a patriarchal model to a more egalitarian one.[1]

This article examines some of the ways in which gender roles changed over the first half of the 20th century. More specifically, it considers how the census adapted to these changes and reflected the new reality. The Census of Canada has been conducted since Confederation and provides us with a perspective on how Canadian society has changed as information on a relatively consistent set of characteristics has been captured over time. This study utilizes data collected in the decennial Censuses of Canada carried out between 1911 and 1951. For the first time computerized microdata for these census years are available.

Social constructs can be almost invisible to contemporary social actors and can form an important part of what is regarded as reality.[2] Some historical perspective is usually required before they can be understood. Gender roles and expectations represent a mode of thinking and acting, and form part of an individual's identity or relation to self and others.[3] These constructs not only condition behaviour but also influence what is regarded as scientifically interesting, worthy of recording and collecting information about. The information collected and the presentation of results are indicative of the roles played by household members and what was deemed important at various junctures. This information ostensibly provided basic knowledge for the formulation of social policy and the transformation of the society that it measured.

The instructions to enumerators who collected information in these early censuses indicate who they were to question, on which information they were to focus, and which answers they were to disregard. Headquarters staff with the Dominion Bureau of Statistics (DBS)—as Statistics Canada was then called—also recoded the information taken down by enumerators and organized it for publication. Their roles are less well documented but administrative reports and the categories used in the census publications provide some insight. The instructions prepared along with the classification and recoding done by census takers reflected the attitudes and social norms of the time.

Between 2003 and 2009 the Canadian Century Research Infrastructure (CCRI) project recompiled and digitized census data from the first half of the 20th century, giving us

a new perspective on the information collected from 1911 through 1951(See "What you should know about this study").[4] A review of administrative material and census questionnaires, along with a comparison between data published by the DBS and estimated data based on the CCRI samples sheds some light on how gender roles were perceived by society.

What was the position of women within their households and families?

The vast majority of women in early 20th century Canada lived in legally-constituted conjugal relationships.

What you should know about this study

Census enumeration

Prior to 1971, the census questionnaires were not filled out by household members in the now-familiar way. Statistics Canada and its predecessor, the Dominion Bureau of Statistics (DBS), employed thousands of enumerators who went door to door visiting virtually every household in the country. In 1951 the enumerator was described by the Chief Statistician of Canada as the "most important man in the organization" although 40% were women that year. These enumerators questioned household members, filled out forms and submitted the data for review and editing by Census Commissioners and DBS headquarters staff. The same basic set of questions was put to each and every household.

Canadian Century Research Infrastructure

The Canadian Century Research Infrastructure (CCRI) is a five-year effort to build a comprehensive database of information on early 20th century Canada that might be used to address research questions from a wide variety of academic disciplines.[1] The project has been supported by the Canadian Foundation for Innovation, federal and provincial governments, a number of Canadian universities and Statistics Canada. It involves a large team of academics, researchers and specialists and is linked to a number of similar international projects.

An important part of the project has been the computerization and rejuvenation of microdata collected by the decennial Censuses of Canada from 1911 to 1951. Data from these pre-computer era censuses had never been digitized and existed only in the form of micro-filmed census returns as completed by enumerators—often in cursively written ink or pencil. Costs dictated that only a sample, about 5%, of completed census forms for each census could be captured. While this data capture cannot be regarded as a new collection it is certainly a new compilation. Data entry personnel worked from what amount to photos of original documents. The coding structure, rules and coding decisions had largely to be reinvented in the absence of corporate memory and with sketchy documentation.

CCRI operators key-entered all responses as recorded by enumerators. An effort was made to digitize the information verbatim or at the lowest level of aggregation. In cases where corrections had been made at the time of the original census by Commissioners or DBS headquarters staff, CCRI operators entered the enumerator's original response. For some variables operators entered the DBS corrections in a second associated field. This allows a researcher to access the effects of such 'corrections'.

CCRI sampling

CCRI teams in five universities across the country worked from the microfilmed schedules hand-written by the original enumerators. The microfilms were made available by Statistics Canada under conditions which respected the privacy of census respondents. The university centres used modern data-capture software to browse the reels of microfilm and capture computer-readable images. Sampling occurred within geographic strata corresponding to census subdistricts (enumeration areas in modern parlance). With some operator input, the software selected dwellings from a randomly determined start point at a predetermined interval. The interval or sampling fraction differed according to the size of the dwelling and, in the case of large dwellings, according to whether the dwelling contained multiple units/households or a collection of individuals in a dormitory or institutional setting. Dwellings with 30 or fewer persons were sampled at a rate of 1 in 20 for 1911, 1 in 25 for 1921, and 1 in 33 for 1931, 1941 and 1951. In 1911 all dwellings with more than 30 occupants were selected. One in 5 households (1 in 4 for 1911) in each multi-unit large dwelling was sampled and 1 in 10 individuals were selected in each large collective dwelling.[2] The reciprocal of these sampling fractions in conjunction with information about the dwelling size and type were used to compute the weights.

1. Gaffield, Chad. (2007). "Conceptualizing and Constructing the Canadian Century Research Infrastructure". *Historical Methods*. *40*(2).
2. Darroch, G., R.B. Smith and M. Gaudreault. (2007). "CCRI Sample Designs and Sample Point Identification, Data Entry, and Reporting (SPIDER) Software". *Historical Methods*. *40*(2), 65-75.

Common-law relationships were infrequent and not reported to census takers until 1981. According to data recompiled by the CCRI, at each census from 1911 to 1951, close to 90% of women had entered into a legal marriage by age 50. The great majority raised children and remained in these families for much of their lives as separation and divorce were extremely rare. Only 2,275 divorces were granted in Canada between 1881 and 1921.[5] According to the data compiled by the CCRI, only about 1 in 1000 women were divorced or separated at each census taken between 1911 and 1941. In 1951 the rate increased to 4 in 1000. In 2006, by contrast, over 120 in 1000 women 15 years of age and over were divorced or separated.

In the early part of the last century men were apparently regarded as the persons in charge of their families. The Census reflected this view. Census takers employed the term 'head of household' when collecting and organizing the information gathered from each family. Other household members were defined by their relationship to the household head and household dwelling information was gathered only with reference to the household head. For example, home ownership was recorded for the household head regardless of who owned the dwelling. Information published on employment and earnings also tended to focus on the household head.

While there was no explicit order to that effect, the man or husband was clearly considered to be the 'head' of the household. The position of males was implicit in the instructions to enumerators which remained essentially unchanged over the 1911 to 1941 period. They stipulated that "The members of the family or household … are to be entered in the following order, namely: Head first, wife second then sons and daughters in the order of their ages, and lastly relatives, servants, boarders or other persons living in the family or household."[6] The 'Head'/'Wife' distinction was also reflected in published tables.[7] Only in single-parent or all-female households was a woman to be considered the 'head'.

The data shows that the vast majority of household heads were male. However, the proportion of household heads that were female grew between 1911 and 1951 (Chart 1). This may be related to absent husbands and fathers, particularly during the period that included the Second World War. An examination of the data digitized by the CCRI indicates that only in a few thousand cases in each census year did enumerators designate a female as head of the household when a male partner was present.

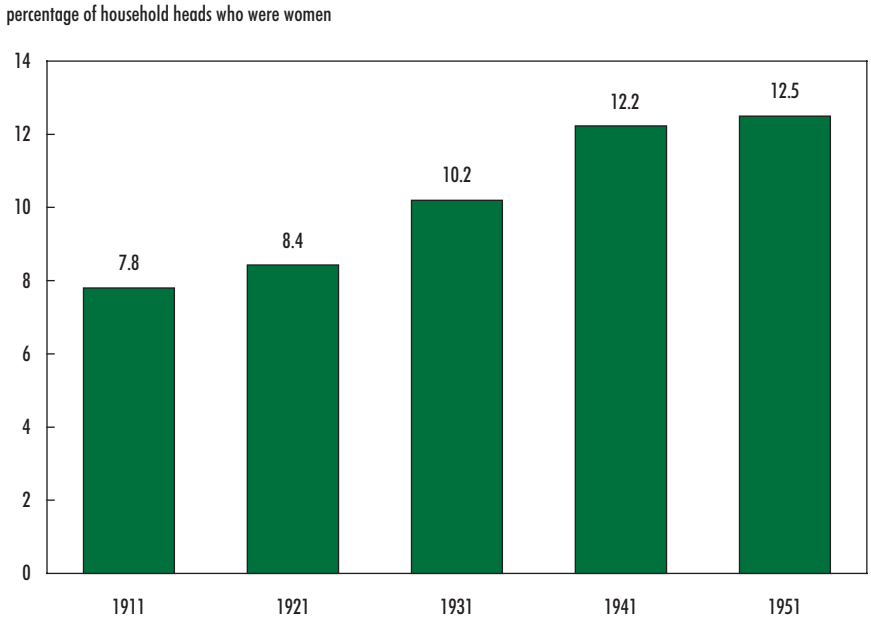
By 1951 society was changing and the census instructions reflected a new awareness. For the first time, it was explicitly mentioned that the husband would be considered the head of the household. However, no hierarchy or social status was implied and census manuals noted that the designation of household head was only for the purposes of organizing the data collected. According to the *Enumeration Manual* for the ninth Census of Canada, "For Census purposes every household must have a head. In households consisting of husband and wife with or without children, the husband will be recorded as 'head'."

Husbands continued to be considered the head of their households up to the beginning of self-enumeration in 1971. In 1976 either husband or wife could be considered head of the household. With the 1981 Census the term was dropped completely.

How was the fertility of women regarded?

Over the early part of the last century, one of the most prominent roles of a wife was to give birth and raise children within a male-headed family. For the 1941 Census detailed information was collected on fertility. Women who were or had been married were asked if they had ever given birth to a child. Over 83% of those 15 years old or over had birthed a child and

Chart 1 Over the first half of the 20th century, the proportion of household heads who were women increased steadily



Source: Dominion Bureau of Statistics, censuses of population compiled by the Canadian Century Research Infrastructure Project.

one in five had given birth to six or more. While almost exactly the same proportion of women in relationships have children today, very few give birth to six or more (less than 3% of those surveyed in 2006[8]).

One pronounced change has been the attitude toward the fertility of unattached women. For example, in 2006 almost 12% of single women 15 years of age or over (excluding those in common-law relationships) had given birth to at least one child. Because childbirth outside of marriage was considered rare, this question was not put to single women in 1941. Perhaps the social stigma associated with having a child outside the confines of marriage was so strong that it precluded enumerators asking the question. However, childbirth outside of wedlock did occur. Data compiled for the CCRI indicate that although unpublished, there were approximately 6,000 births outside of wedlock recorded in 1941.

Was the ethnic legacy of mothers acknowledged?

While women bore and raised children, a child's ancestry was traced through the father. A mother's ancestry was not considered in the classification of the ancestry of their child. It was not until 1981 that both parents' ancestry was recorded.

The 1931 Census enumerator instructions for the collection of ancestry data are typical for the period. They directed that, "A person whose father is English and whose mother is French will be recorded as of English origin, while a person whose father is French and whose mother is English will be recorded as of French origin, and similarly with other combinations..." These instructions applied to the majority of census respondents who were of European or 'white' origins. Aboriginals and members of visible minority groups were treated differently.[9]

The logic of tracing ancestry through the male line would seem to imply that each person should have a single origin. Indeed the instructions given to enumerators did not allow for multiple origins. The Dominion Bureau of Statistics did not publish any figures for people claiming more than one origin between 1911 and 1951. However, the data compiled by the CCRI clearly show that enumerators did sometimes record multiple ancestries. These data show a gradual increase in multiple ancestries from about 1 in 300 respondents in 1921 and 1931 to about 1 in 200 in 1941 and over 1 in 150 in 1951. With the 1981 Census, Canadians were permitted to write in as many ethnicities as they felt they had. They were thus able to report their maternal ancestry.

How was citizenship dealt with for women?

Women did not fully enjoy the rights of citizenship in early 20th century Canada. They did not, for instance, gain the right to vote in federal elections until 1920. According to Canadian law, before 1932 a woman took on the nationality of her husband when they married. A woman born or naturalized in Canada who married an 'alien'[10] lost her Canadian citizenship. Women legally gave up their right to vote and to a Canadian passport if they married someone other than a British subject or if their husband became an alien over the course of their marriage. Similarly, a woman of foreign nationality gained Canadian citizenship by virtue of her marriage to a Canadian.[11] In 1921 and 1931 enumerator instructions indicated that "A married woman is to be reported as of the same citizenship as her husband."

Regardless of gender, citizenship could be lost in a number of ways. For example, it was possible to lose citizenship via renunciation or taking on another allegiance. While it is not possible to determine from census data precisely how many Canadian-born people lost their rights, according to the 1921 to 1941 census data compiled by the CCRI, the number of Canadian- and British-born women residing in Canada without citizenship exceeded, by a considerable number, the number of men in that situation (Chart 2). Loss of citizenship status due to marriage to a non-British subject is the most likely explanation for this gender difference.

Between 1932 and 1947, a married woman's citizenship depended on the nationality law of her husband's country of allegiance. If she legally acquired his citizenship she lost her Canadian status. Otherwise she remained Canadian. The citizenship law of 1947 removed much of the gender discrimination with respect to citizenship and census data-collection practices quickly followed. By 1951, the number of Canadian born who were not citizens was more equal for men and women (Chart 2).

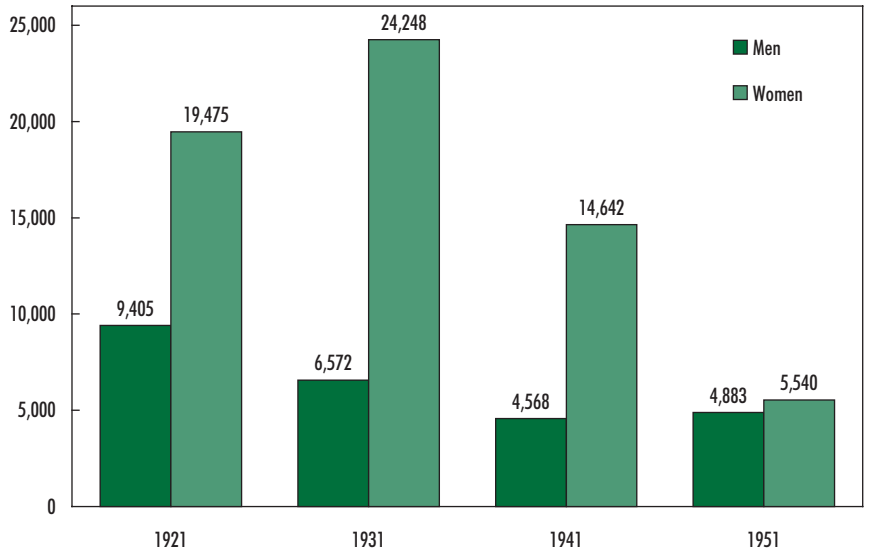
Was the work of women acknowledged?

Perhaps the most interesting area in which social conventions changed over the 20th century is the participation of women in paid employment, their occupations and earnings. During the early part of the 20th century, most women did not participate in the paid labour force. In 1931, for example, just 16% of women were involved in paid employment, compared to almost 70% of men. By 2006, however, the employment rate for women was almost 60%. There continue to be differences in the employment experiences of men and women. For example, the barriers faced by women in the workforce and the gap in earnings between men and women have been well documented[12] and have led to federal and provincial employment equity legislation.

While the unpaid work done in the home or for the family was important, during the first half of the 20th century governments and businesses were more interested in labour sold on markets.[13] Before the 1931 Census, women working in their own home were regarded as having no occupation. For example, the enumeration manual for 1921 states

Chart 2 Women born in Canada were more likely to be without Canadian citizenship

number of people born and living in Canada who did not have Canadian citizenship, in thousands



Source: Dominion Bureau of Statistics, censuses of population compiled by the Canadian Century Research Infrastructure Project.

that under occupation: "In the case of a woman doing housework in her own home, without salary or wages, and having no other employment, the entry should be none." While the information was not published by the Dominion Bureau of Statistics, enumerators often recorded the answer 'homemaker' or 'housewife' in this situation. Beginning in 1931 the enumeration manual indicated that the term "homemaker" was to be used for *women* working in their own homes. CCRI operators recorded the answer 'homemaker' for about 2.45 million females and 12,600 males when they recompiled the 1941 Census information from the original returns. The figure for males had not been published by the DBS.

Little official documentation has survived about the coding structures used by those who compiled and tabulated census information in the early part of the last century. CCRI staff coded occupation anew from the information originally written down by enumerators. Needless to say, jobs and occupational categories have changed over the past half century and the occupational classification used by the CCRI project differs from the one originally employed by the DBS.

For instance, CCRI coders identified many more gainfully employed women than the original census data published by the DBS. Indeed, the 1941 Census data recompiled by the CCRI had more than three times as many unpaid family workers as did the published counts from the era (data not shown). It seems the modern coders were more likely than the original coders to describe some homemakers and women on farms as 'unpaid family workers'. For census purposes, the term 'unpaid family worker' applied only to someone working in an enterprise for which someone in the family receives money. Although the modern census now gathers information on elder care, child care and other work performed in the home, homemakers are still not regarded as being a part of the labour market.

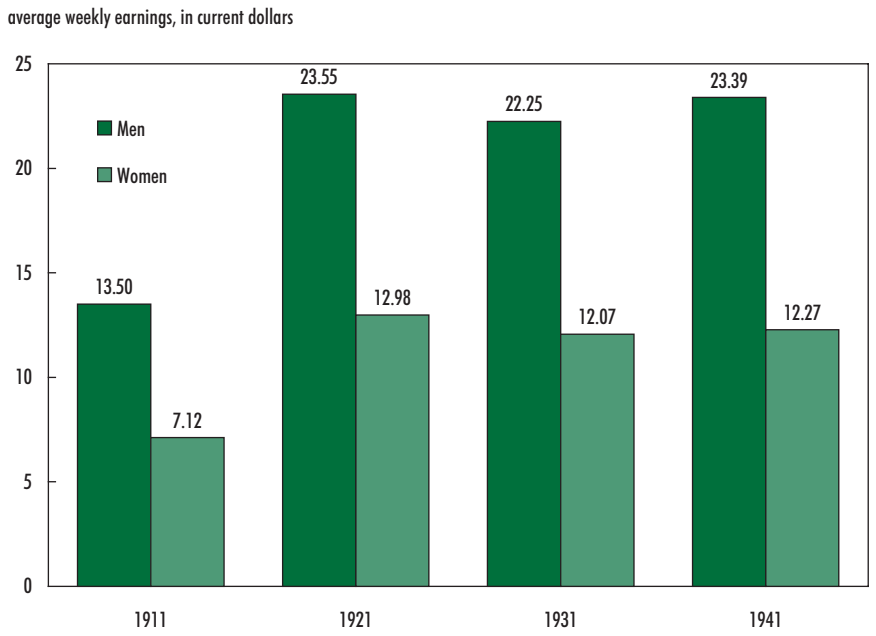
Women who worked in occupations normally deemed to be the preserve of men may not have been counted in early censuses. Enumerators were explicitly instructed to treat with skepticism any suggestion that a woman had any 'unusual' occupation. Further inquiry and correction was deemed necessary in such cases. For example, according to the 1931 enumeration manual, "There are many occupations such as carpenter and blacksmith which women usually do not follow. Therefore, if you are told that a woman follows an occupation which is peculiar or unusual for a woman, verify the statement."

A similar instruction appeared in the 1921 and 1941 manuals. The occupation data published by the DBS after each census from 1911 to 1951 indicates that there were no females in these occupations. The data coded by CCRI suggests, however, that even after close questioning, hundreds of women were deemed by enumerators to have worked as carpenters and blacksmiths. These answers appear to have been recoded by headquarters staff when official tabulations were prepared.

Proportionally few women have traditionally gone into trade-related occupations and this continues today. For example, women accounted for only 3% of those registered in apprenticeship programs in the construction trades as late as 2005.[14] The modern census makes no distinction between men and women when collecting occupational data and where numbers warrant these data are published.

The earnings of women have not always been published. The census reports from the beginning of the 20th century focused on the earnings of household heads. Following the 1921 Census, for example, many earnings tables were produced for male heads of households only. The data was taken down by enumerators, however, and can be tabulated based on the CCRI sample.

Chart 3 In the early 1900s, women earned just over half of what men earned



Source: Dominion Bureau of Statistics, censuses of population compiled by the Canadian Century Research Infrastructure Project.

Where the DBS did publish earnings for women they correspond with the data obtained from the CCRI. On average for the census years under study, a working woman earned just over 50 cents for each dollar earned by a working man.[15] The gap did not change dramatically between 1921 and 1941. The persistent gender wage gap has been an important focus of Statistics Canada analysis and publications over the past few decades.[16]

Summary

The primary role of most adult women living in the first half of the 20th century was to care for their family and home. Men more often worked outside the home for pay and assumed the role of the household head. Census collections were designed with this social reality in mind. Husbands were the official heads of their households for census purposes and other household members were defined by their relationship to the male head.

According to the norms of the time ancestry or ethnicity was traced in the census through the male line. Children were recorded as having the cultural heritage of their fathers.

Until 1947, a women's citizenship was tied to her husband's citizenship both legally and for census purposes.

Women working in their homes were not considered 'gainfully employed'. Before 1931 they were considered to have no occupation. Women in some non-traditional or 'unusual' occupations, moreover, were not tabulated in census publications.

Census collection emphasized paid work and in some cases earnings information was published only for heads of households. According to the data recompiled for the CCRI, average weekly earnings for women and men in the labour market differed substantially for the census years examined here. On average, a woman in the paid workforce earned about half of what a man earned in 1921, 1931 and 1941. Interestingly, although the wage gap has narrowed, in 2008 the average hourly earnings for women continued to be below those of men's—illustrating that there remain differences in labour market experiences between genders.

Censuses were planned and carried out within a social and historical context. The expectations of census takers played a role in what they looked for and in what they found. The data collected and published tended to reflect and reinforce the norms of the day. The original and rejuvenated census data, documentation and instruction manuals from the early part of the twentieth century enable researchers to examine how gender roles have evolved and changed as changes in society occurred.

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1. Bakker, I. ed. (1996). *Rethinking Restructuring: Gender and Change in Canada*. Toronto: University of Toronto Press.
2. Berger, P. L. and T. Luckman. (1966). *The Social Construction of Reality: A Treatise in the Sociology of Knowledge*. Garden City: Doubleday & Co.
3. Foucault, M. (1985). *The Use of Pleasure: The History of Sexuality: Volume II*. Random House.
4. The 1961 Census was computerized but has been rendered inaccessible by technological and other changes. It too is being rejuvenated but is not yet available.
5. Dominion Bureau of Statistics. (1921). Population, age, conjugal condition, birthplace, immigration, citizenship, language, educational status, school attendance, blindness and deaf mutism: Sixth Census of Canada, 1921, Volume 2, Bulletin XV.
6. Census and Statistics Office. (1911). Instructions to officers, commissioners and enumerators: Fifth Census of Canada.
7. Dominion Bureau of Statistics. (1927). Population: Dwellings, Families, Conjugal Condition of Family Head, Children, Orphanhood, Wage Earners. Sixth Census of Canada, Volume III.

8. Special tabulation from the General Social Survey, Cycle 20. The data have not been age-standardized.
9. The history of the census origins or ancestry question is as complex and storied as that of gender. It also reflects evolving social attitudes of the period. Early censuses asked for 'racial or tribal origins'. This terminology was dropped following World War II. In 1951 a question in the same position and otherwise sharing much the same vocabulary asked simply about 'Origins'. Before 1951, persons of mixed white and visibly different ancestry were ascribed the origins of their visibly-different parent of whatever gender. The children of mixed 'white' and Aboriginal parents were given the ancestry of their mother.
10. Aliens did not include those born as British subjects in the United Kingdom or elsewhere in the British empire.
11. *Canadian Nationals Act of 1921- An Act to Define Canadian Nationals and to provide for the renunciation of Canadian Nationality*. Chapter 21. Revised Statutes of Canada 1927. See also the Immigration Acts of 1910 and 1927.
12. For example: Statistics Canada. (2005). *Women in Canada: A gender-based statistical report. 5th edition*. Catalogue no. 89-503-XPE.
13. Statistics Canada. (1995). *Households' unpaid work: Measurement and Valuation*. Studies in National Accounting. Catalogue 13-603E.
14. Statistics Canada. (2007). *The Daily*, November 15, 2007. Registered Apprenticeship Training Programs. Watt-Malcolm, Bonnie and Beth Young. (2003). Canadian women in the industrial trades: a historical perspective. In the Proceedings of The Changing Fact of Work and Learning Conference, September Edmonton, Alberta. Retrieved February 11, 2010 from http://wln.ualberta.ca/papers/pdf/47.pdf.
15. These are overall averages and do not take account experience, education, hours worked or occupation.
16. Statistics Canada. (2005).

Table 1 Estimates of population, by sex, for July 1, Canada, select years

	1981	1991	2003	2004	2005	2006	2007	2008	2009
					number				
Sex									
Men	12,351,233	13,904,391	15,675,460	15,825,754	15,979,800	16,147,873	16,325,702	16,524,504	16,732,476
Women	12,468,682	14,133,029	15,964,210	16,114,922	16,265,409	16,428,201	16,606,254	16,802,833	17,007,383
					years				
Median age									
Men	28.8	32.5	37.1	37.4	37.7	38.0	38.2	38.4	38.6
Women	30.2	34.0	38.9	39.2	39.6	39.9	40.1	40.3	40.5

Source: Statistics Canada, CANSIM Table 051-0001.

- In 1981 Canada's population was approximately 25 million. In 2009, the population was estimated to be almost 34 million. In recent years, much of the population growth has been a result of international migration.
- The population of Canada continues to age. In 2009, the median age for the Canadian population was 39.5 years. The median age of women was 40.5 compared to 38.6 for men. Fertility rates persistently below the generation replacement level and an increasing life expectancy are the main factors explaining the ageing process of the Canadian population.

Table 2 Life expectancy at birth and at age 65, by sex, Canada, select years

	1981	1991	2003	2004	2005	2006
	years					
Life expectancy						
At birth	75.6	77.8	79.9	80.2	80.4	80.8
Men	72.1	74.6	77.4	77.8	78.0	78.4
Women	79.3	80.9	82.4	82.6	82.7	83.0
At age 65	17.0	18.0	19.2	19.5	19.6	19.9
Men	14.7	15.8	17.4	17.7	17.9	18.2
Women	19.2	19.9	20.8	21.0	21.1	21.4

Source: Statistics Canada, CANSIM Tables 102-0511 and 102-0025.

- Life expectancy in Canada continues to increase. Life expectancy at birth was 81 years in 2006, compared with 76 years in 1981. A girl born in 2006 can expect to live 83 years; a boy can expect to live 78 years.
- The difference in life expectancy for men and women is decreasing. In 1981 there was a difference in life expectancy of 7.2 years for women and men. By 2006 this difference had shrunk to 4.6 years.
- Life expectancy at age 65 is also increasing for Canadians. For someone who was 65 in 1981, they could expect to live another 17 years compared to 20 years for someone who was 65 in 2006.
- Between 1981 and 2006, the increase in life expectancy for men at age 65 was impressive. For example, in 1981 a male aged 65 could expect to live another 14.7 years compared with a female who could expect to live another 19.2 years. By 2006, a 65 year old man could expect to live another 18.2 years compared to 21.4 years for a 65 year old woman.

Table 3 Indicators of well-being, by sex, Canada, select years

	2003	2005	2007	2008
	percentage of population 12 years and older			
Life satisfaction (very satisfied or satisfied)				
Total	91.3	91.8	91.9	91.4
Men	91.3	91.9	92.0	91.5
Women	91.4	91.7	91.8	91.2
Life stress (quite a lot)				
Total	24.1	22.9	22.5	22.3
Men	23.4	21.9	21.5	21.2
Women	24.8	23.8	23.5	23.4
Sense of belonging to local community (somewhat strong or very strong)				
Total	63.9	64.4	64.6	65.0
Men	63.5	64.0	63.9	65.0
Women	64.2	64.7	65.4	64.9

Source: Statistics Canada, CANSIM table 105-0501.

- More than 9 out of 10 women and men stated that they were satisfied or very satisfied with their life in general in 2008.
- Men and women were equally likely to feel stress. For example, in 2008 a little more than 1 in 5 men and women stated that they had quite a lot of life stress.
- Research has shown that having a strong sense of belonging to one's community is highly correlated with physical and mental well-being. Between 2003 and 2008, about 65% of Canadians stated that they had a somewhat strong or very strong sense of belonging to their community.

Table 4 Health indicators, by sex, Canada, select years

	2003	2005	2007	2008
	percentage of population 12 years and older			
Health (very good or excellent)				
Total	58.4	60.1	59.6	58.9
Men	59.5	60.6	60.3	59.1
Women	57.2	59.6	59.0	58.7
Health (fair or poor)				
Total	11.3	11.2	11.3	11.4
Men	10.3	10.7	10.9	11.2
Women	12.4	11.7	11.8	11.7
Mental health (very good or excellent)				
Total	73.4	74.4	74.8	74.4
Men	73.6	75.0	75.5	75.3
Women	73.3	73.9	74.1	73.4
Mental health (fair or poor)				
Total	4.7	4.9	4.7	5.1
Men	4.3	4.5	4.6	4.7
Women	5.1	5.2	4.7	5.5
Participation or activity limitation				
Total	31.3	29.7	31.3	29.0
Men	29.5	28.6	29.6	27.9
Women	33.1	30.9	33.0	30.1
Diabetes				
Total	4.6	4.9	5.8	5.9
Men	4.9	5.4	6.4	6.3
Women	4.3	4.4	5.2	5.4
High blood pressure				
Total	14.4	15.0	16.0	16.4
Men	13.4	14.2	15.1	15.9
Women	15.4	15.7	16.8	16.9
Asthma				
Total	8.4	8.3	8.1	8.4
Men	7.1	6.9	6.7	7.3
Women	9.6	9.7	9.4	9.5
Arthritis				
Total	16.8	16.4	15.0	15.3
Men	12.6	12.5	11.8	12.0
Women	20.8	20.1	18.1	18.5
Body mass index – overweight (self reported)[1,2]				
Total	34.1	34.2	34.0	33.8
Men	41.3	41.2	40.9	40.2
Women	26.8	27.1	27.1	27.4

Table 4 Health indicators, by sex, Canada, select years (continued)

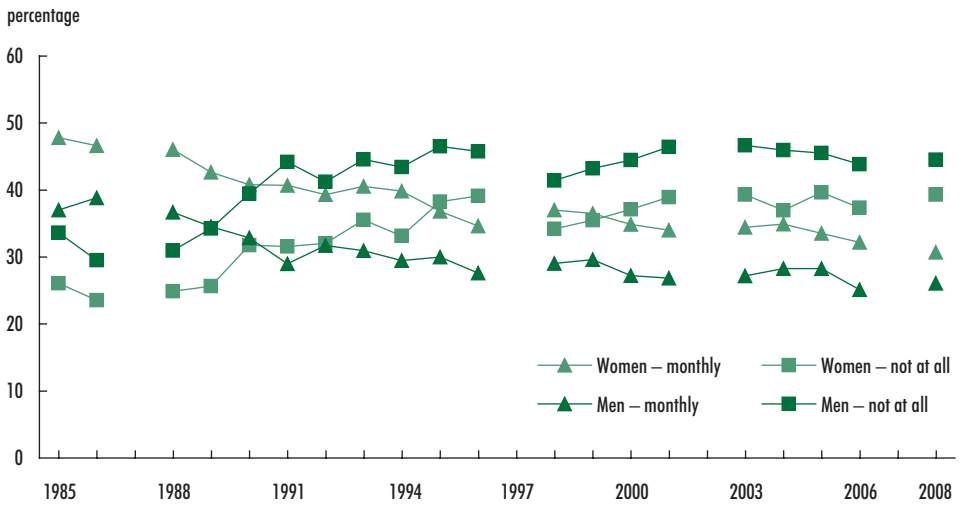
	2003	2005	2007	2008
	percentage of population 12 years and older			
Body mass index – obese (self reported)[1,2]				
Total	15.3	15.8	16.8	17.2
Men	16.0	16.9	17.9	18.3
Women	14.5	14.7	15.8	16.2

1. For those 18 years of age and over.
2. Body mass index (BMI) is a method of classifying body weight according to health risk, according to the World Health Organization (WHO) and Health Canada guidelines. It is calculated by dividing the respondent's body weight (in kilograms) by their height (in metres) squared.

Source: Statistics Canada, CANSIM table 105-0501.

- While women and men were equally likely to state that their health was very good or excellent in 2008, women were slightly more likely than men to state they have a participation or activity limitation (30% vs. 28%).
- The incidence of high blood pressure increased between 2003 and 2008 from about 14% to just over 16%. The increase occurred among both men and women and by 2008 about 16% of men and 17% of women had high blood pressure.
- Women were more likely to have arthritis or asthma than men. In 2008, close to 10% of women compared to 7% of men had asthma. The proportion of women with arthritis was about 19% compared to 12% of men.

Chart 1 Religious attendance rates, by sex, 1985 to 2008



Notes: "Monthly" refers to attendance at religious services at least once a month during the previous 12 months.
"Not at all" indicates not attending religious services at all during the previous 12 months.
Prior to 2005, the General Social Survey did not ask those who had no religious affiliation about the frequency of attending religious services and they were assumed to have not attended. In 2006 and 2008, all respondents were asked about frequency of attendance. In 2008, about 80% of those with no religious affiliation did not attend and 16% attended infrequently.

Source: Statistics Canada, General Social Survey, 1985 to 2008.

- Women were more likely to attend a religious service at least once a month over the 1985 to 2008 period than were men. However, by 2008 the difference between monthly attendance rates for men and women had declined.

Table 5 Highest level of educational attainment for the population aged 25 to 64, by sex, Canada, 2001 and 2006

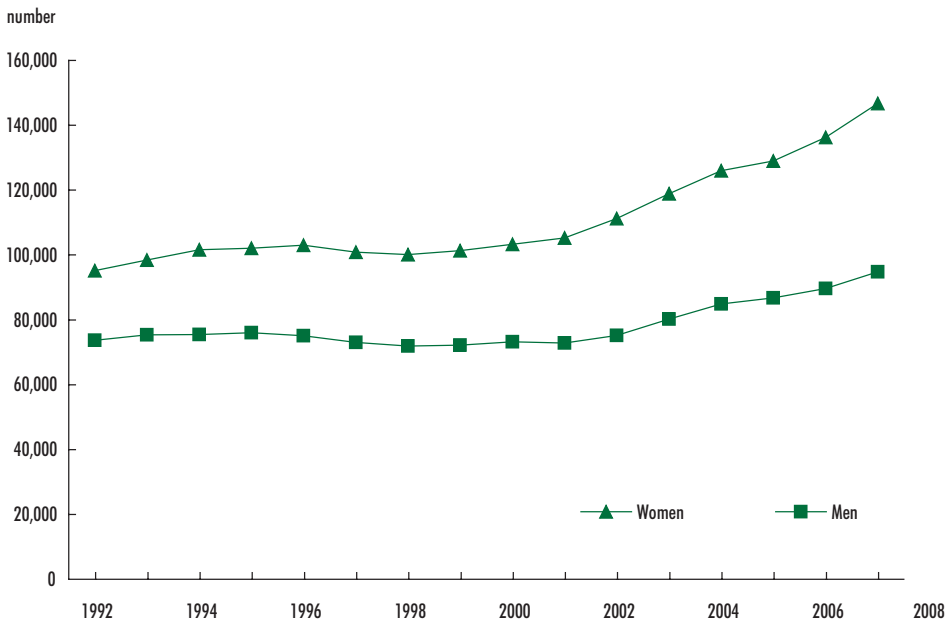
	2001	2006
	percentage	
No certificate, diploma or degree[1]	24.6	15.4
Men	25.3	16.4
Women	23.9	14.5
High school certificate or equivalent[1]	22.0	23.9
Men	20.6	22.8
Women	23.4	25.0
Apprenticeship or trades certificate or diploma	12.9	12.4
Men	16.5	16.0
Women	9.3	9.0
College, CEGEP or other non-university certificate or diploma	17.9	20.3
Men	15.0	17.9
Women	20.7	22.6
University certificate or diploma below the bachelor level[2]	2.9	5.0
Men	2.4	4.3
Women	3.4	5.6
University certificate, diploma or degree at bachelor's level or above	19.7	22.9
Men	20.2	22.6
Women	19.2	23.3

1. When observing 2001-2006 trends for "No degree, certificate or diploma" and "High school graduation certificate or equivalent", readers should be aware that the census questionnaire was redesigned for 2006 to address suspected underreporting of high school completion.
2. Users should be aware that in 2006 there was unexpected growth in the 'University certificate or diploma below the bachelor level' category compared to the 2001 Census. It is recommended that no comparison be made between 2001 and 2006 data for this category.

Source: Statistics Canada, Census of population, 2001 and 2006.

- Six out of every 10 adults aged between 25 and 64 had completed some form of postsecondary education in 2006, according to the census. Men and women were equally likely to have some type of postsecondary education.
- Just under one-quarter (24%) of the adults aged 25 to 64 had a high school diploma as their highest level of educational attainment, while 15% had less than a high school education.
- The proportion of men and women who had a university certificate, diploma or degree at the bachelor's level or above increased between 2001 and 2006. For example, in 2001, 19.2% of women and 20.2% of men had a bachelor's degree or higher. By 2006, 23.3% of women and 22.6% of men had a bachelor's degree or higher.

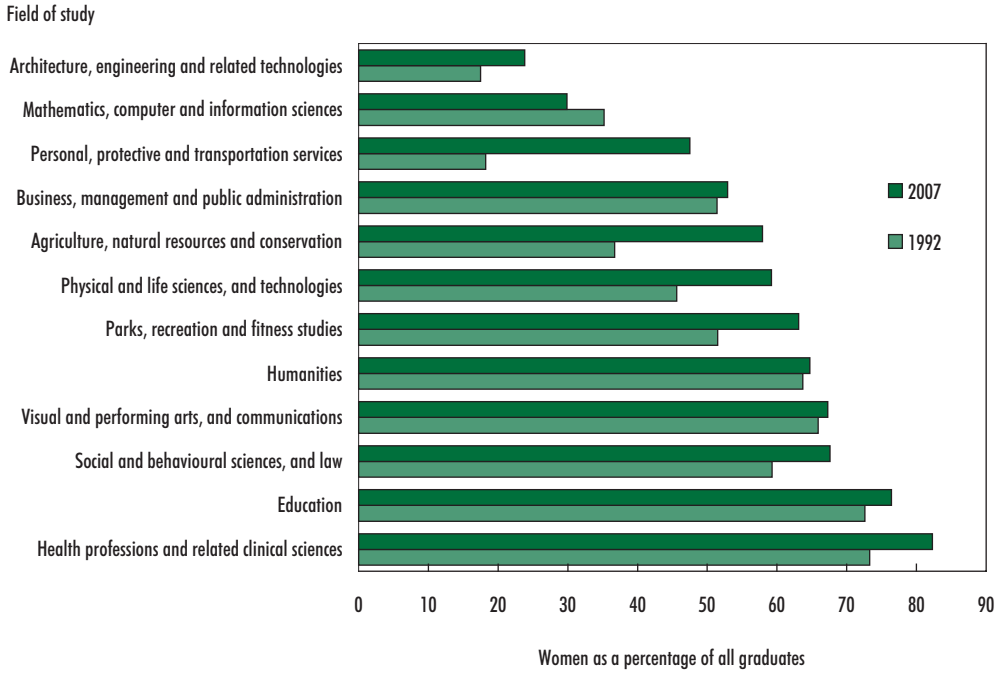
Chart 2 Among university graduates, women continue to outnumber men



Source: Statistics Canada, Postsecondary Student Information System.

- The number of students graduating from Canadian universities rose 43% between 1992 and 2007, increasing from 169,000 in 1992 to 242,000 in 2007. The number of both male and female graduates has grown steadily since 2002, following a period of stagnant growth in the mid-1990s.
- In 2007, women made up almost 61% of all university graduates up from 56% in 1992.

Chart 3 Women now make up nearly 60% of all university graduates in the physical and life sciences



Source: Statistics Canada, Postsecondary Student Information System.

- Women have increased their share of university graduates such that in 2007, they accounted for more than 50% of graduates in all fields, except for three: architecture and engineering; mathematics and computer sciences; and personal, protective and transportation services.
- Women increased their share of graduates from less than 50% in 1992 to over 50% in 2007 in two fields—physical and life sciences; and agriculture, natural resources and conservation.

Table 1 Labour force characteristics, by sex, Canada, 1998 to 2009

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
	in thousands											
Labour force												
Total	15,316.3	15,588.3	15,847.0	16,109.8	16,579.3	16,958.5	17,182.3	17,342.6	17,592.8	17,945.8	18,245.1	18,368.7
Men	8,324.3	8,457.6	8,569.2	8,690.9	8,906.2	9,067.7	9,166.0	9,243.7	9,335.4	9,492.8	9,654.0	9,684.6
Women	6,992.0	7,130.7	7,277.8	7,418.9	7,673.1	7,890.9	8,016.3	8,098.8	8,257.3	8,453.0	8,591.2	8,684.1
Employed												
Total	14,046.2	14,406.7	14,764.2	14,946.2	15,310.4	15,672.3	15,947.0	16,169.7	16,484.3	16,866.4	17,125.8	16,848.9
Men	7,612.8	7,797.2	7,973.9	8,035.8	8,184.4	8,348.1	8,480.6	8,594.7	8,727.1	8,888.9	9,021.3	8,772.7
Women	6,433.4	6,609.6	6,790.4	6,910.3	7,126.0	7,324.2	7,466.4	7,575.0	7,757.2	7,977.5	8,104.5	8,076.2
Full-time employment[1]												
Total	11,403.4	11,759.5	12,093.6	12,242.5	12,439.3	12,705.3	12,998.1	13,206.2	13,509.7	13,803.1	13,976.6	13,628.3
Men	6,811.2	6,992.1	7,150.8	7,195.3	7,287.9	7,423.0	7,559.3	7,664.0	7,781.0	7,909.9	8,008.0	7,726.3
Women	4,592.2	4,767.4	4,942.8	5,047.1	5,151.4	5,282.3	5,438.8	5,542.3	5,728.7	5,893.2	5,968.7	5,902.0
Part-time employment												
Total	2,642.8	2,647.3	2,670.6	2,703.7	2,871.1	2,967.0	2,948.9	2,963.5	2,974.7	3,063.3	3,149.2	3,220.5
Men	801.6	805.1	823.1	840.5	896.5	925.0	921.3	930.7	946.1	979.0	1,013.3	1,046.4
Women	1,841.2	1,842.2	1,847.5	1,863.2	1,974.6	2,041.9	2,027.6	2,032.8	2,028.5	2,084.3	2,135.9	2,174.2
Unemployed												
Total	1,270.1	1,181.6	1,082.8	1,163.6	1,268.9	1,286.2	1,235.3	1,172.8	1,108.4	1,079.4	1,119.3	1,519.8
Men	711.5	660.4	595.3	655.1	721.7	719.6	685.4	649.0	608.3	603.9	632.6	912.0
Women	558.6	521.2	487.5	508.5	547.2	566.6	549.9	523.8	500.1	475.5	486.6	607.9
Not in the labour force												
Total	8,206.4	8,198.6	8,247.2	8,334.5	8,218.0	8,147.9	8,261.1	8,462.9	8,592.4	8,607.5	8,679.5	8,940.5
Men	3,224.6	3,225.3	3,273.4	3,333.5	3,294.8	3,284.0	3,349.2	3,448.9	3,547.2	3,572.5	3,597.8	3,761.8
Women	4,981.8	4,973.3	4,973.8	5,001.0	4,923.1	4,863.9	4,911.9	5,014.0	5,045.1	5,035.0	5,081.7	5,178.7

Table 1 Labour force characteristics, by sex, Canada, 1998 to 2009 (continued)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
	percentage											
Unemployment rate												
Total	8.3	7.6	6.8	7.2	7.7	7.6	7.2	6.8	6.3	6.0	6.1	8.3
Men	8.5	7.8	6.9	7.5	8.1	7.9	7.5	7.0	6.5	6.4	6.6	9.4
Women	8.0	7.3	6.7	6.9	7.1	7.2	6.9	6.5	6.1	5.6	5.7	7.0
Employment rate												
Total	59.7	60.6	61.3	61.1	61.7	62.4	62.7	62.7	63.0	63.5	63.6	61.7
Men	65.9	66.7	67.3	66.8	67.1	67.6	67.8	67.7	67.7	68.0	68.1	65.2
Women	53.7	54.6	55.4	55.6	56.6	57.4	57.8	57.8	58.3	59.1	59.3	58.3

1. Full-time employment is for those working 30 hours or more per week at their main or only job.

Source: Statistics Canada, CANSIM table 282-0002.

- In 2009, women made up 47% of the labour force. While women continued to be more likely to work part-time than men, close to 73% of women who worked were full-time workers, up from 71% in 1998.
- Between 1998 and 2008 the employment rate increased from about 60% to almost 64%. This was the result of an expanding economy and job growth. The employment rate for men increased from about 66% to 68%. The growth in the employment rate for women was more pronounced increasing from 54% to 59% between 1998 and 2008. In 2009 however, the employment rate contracted for both women and men.
- After several years of decline—the unemployment rate in Canada climbed to 8.3% in 2009. While both men and women experienced increasing rates of unemployment, the increase was more profound for men. Between 2008 and 2009 the number of unemployed men increased by 44%, as the unemployment rate for men climbed from 6.6% to 9.4% in 2009. For women, the number unemployed increased by 25% between 2008 and 2009, resulting in an increase in the unemployment rate for women—from 5.7% to 7.0%.
- For each year between 1998 and 2008 the number of individuals working full-time grew. However, in 2009 the number of men working full-time declined by 3.5% and women experienced a 1.1% decline in the number working full-time. At the same time, the number of men and women working part-time continued to increase.

Table 2 Average hourly wages of employees aged 15 and older by sex, job permanence and union coverage, by sex, Canada, annual, 1998 to 2008

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
	average hourly wages[1] in dollars										
All employees(pemanent and temporary)	15.78	16.17	16.66	17.22	17.66	18.04	18.50	19.09	19.72	20.41	21.32
Men	17.32	17.79	18.38	18.98	19.37	19.75	20.16	20.74	21.43	22.17	23.18
Women	14.10	14.42	14.81	15.35	15.84	16.26	16.78	17.38	17.96	18.62	19.43
Union coverage[2]	18.68	19.05	19.46	19.89	20.51	20.98	21.57	22.15	22.73	23.51	24.46
Men	19.63	20.05	20.48	20.95	21.42	21.96	22.44	22.96	23.58	24.32	25.28
Women	17.57	17.91	18.30	18.72	19.53	19.92	20.66	21.30	21.86	22.71	23.65
Non-union coverage[3]	14.35	14.80	15.32	15.94	16.31	16.65	17.08	17.65	18.33	18.98	19.89
Men	16.12	16.67	17.33	18.00	18.40	18.67	19.10	19.69	20.43	21.20	22.24
Women	12.50	12.84	13.21	13.79	14.10	14.56	14.98	15.54	16.15	16.71	17.48
Permanent employees[4]	16.27	16.69	17.24	17.81	18.27	18.62	19.12	19.73	20.38	21.07	21.98
Men	17.91	18.42	19.06	19.65	20.09	20.45	20.87	21.50	22.19	22.93	23.97
Women	14.45	14.81	15.25	15.80	16.31	16.70	17.27	17.86	18.49	19.14	19.94
Union coverage	18.87	19.29	19.71	20.15	20.78	21.24	21.87	22.43	23.07	23.82	24.79
Men	19.80	20.27	20.70	21.20	21.68	22.18	22.74	23.21	23.85	24.57	25.55
Women	17.73	18.13	18.55	18.95	19.80	20.20	20.94	21.59	22.24	23.06	24.01
Non-union coverage	14.92	15.40	16.01	16.65	17.04	17.34	17.80	18.41	19.11	19.77	20.68
Men	16.86	17.45	18.20	18.86	19.30	19.57	19.97	20.65	21.40	22.17	23.24
Women	12.89	13.25	13.69	14.30	14.63	15.04	15.53	16.07	16.72	17.29	18.04
Temporary employees[5]	12.14	12.34	12.60	13.20	13.55	13.95	14.26	14.91	15.30	15.99	16.59
Men	12.62	12.98	13.28	13.98	14.27	14.62	14.90	15.45	16.02	16.78	17.30
Women	11.67	11.71	11.94	12.48	12.87	13.31	13.68	14.40	14.64	15.25	15.91
Union coverage	16.82	16.78	17.18	17.76	18.30	18.78	19.09	19.94	20.20	21.14	21.84
Men	17.52	17.59	18.11	18.59	19.08	19.93	19.63	20.72	21.29	22.14	22.86
Women	16.23	16.05	16.38	17.01	17.63	17.79	18.66	19.29	19.30	20.32	20.99

Table 2 Average hourly wages of employees aged 15 and older by sex, job permanence and union coverage, by sex, Canada, annual, 1998 to 2008 (continued)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
	average hourly wages[1] in dollars										
Non-union coverage	10.56	10.87	11.03	11.53	11.75	12.10	12.47	13.01	13.38	13.97	14.54
Men	11.13	11.55	11.75	12.33	12.56	12.74	13.30	13.60	14.12	14.85	15.33
Women	9.99	10.17	10.31	10.78	10.93	11.45	11.67	12.42	12.65	13.12	13.75

1. Information is collected on the usual wages or salary of employees at their main job. Respondents are asked to report their wage/salary before taxes and other deductions, and include tips, commissions and bonuses.
2. Employees who are members of a union and employees who are not union members but who are covered by a collective agreement or a union contract.
3. Employees who are not members of a union or not covered by a collective agreement or a union contract.
4. A permanent job is one that is expected to last as long as the employee wants it, given that business conditions permit. That is, there is no pre-determined termination date.
5. A temporary job has a predetermined end date, or will end as soon as a specified project is completed.

Source: Statistics Canada, Labour Force Survey, 1998 to 2008.

- Average hourly wage growth was strong for both women and men between 1998 and 2008. Unionized workers continued to enjoy hourly wages that were higher than non-unionized workers. In 2008, unionized employees' hourly wages were about 23% higher than their non-unionized counterparts.
- In 1998, women's average hourly wages were about 81% of men's. By 2008, the average hourly wage ratio was 84% as the gap decreased. However, the size of the wage gap differed by union status. For example, women who were unionized employees had average hourly wages that were about 94% of men's in 2008 compared to 80% in 1998. The gap between women's and men's hourly wages was larger if employees were non-unionized. In 2008, non-unionized women average hourly wages were $17.48 compared to $22.24 for men who were non-unionized jobs, the wage ratio remained largely unchanged at 78% in 1998 and 79% in 2008.
- Temporary employees' average hourly wages were less than the wages of permanent workers at an average of $16.59 per hour in 2008 compared to $21.98 for permanent employees. The hourly wage ratio between women and men who were temporary workers was 92%, meaning that for every dollar earned by a man, a woman earned 92 cents. This ratio was unchanged from 1998.

Table 3 Registered pension plans and members, by sex and type of plan, Canada, 2004 to 2008

	2004	2005	2006	2007	2008
	number				
All RPPs[1]	14,777	15,336	15,130	18,594	19,185
All members	5,589,799	5,670,684	5,690,580	5,768,280	5,908,633
Men	2,959,631	2,976,031	2,977,758	2,973,239	3,039,988
Women	2,630,168	2,694,653	2,712,822	2,795,041	2,868,645
Defined benefit plans	7,014	7,561	7,611	11,056	11,539
Members	4,557,331	4,605,601	4,600,581	4,590,805	4,538,192
Men	2,350,783	2,347,405	2,337,151	2,282,930	2,251,795
Women	2,206,548	2,258,196	2,263,430	2,307,875	2,286,397
Defined contribution plans	7,507	7,485	7,196	7,160	7,165
Members	876,559	885,840	893,403	899,540	935,236
Men	521,157	524,102	525,998	534,214	553,361
Women	355,402	361,738	367,405	365,326	381,875
Hybrid plans[2]	31	32	16	15	14
Members	49,407	15,461	11,351	11,337	16,881
Men	24,300	9,938	6,198	6,194	8,663
Women	25,107	5,523	5,153	5,143	8,218
Composite or combination plans[3]	173	161	150	144	140
Members	64,812	96,781	92,265	140,862	151,150
Men	39,523	52,126	52,387	75,986	82,015
Women	25,289	44,655	39,878	64,876	69,135
Defined benefit and contribution plans[4]	..	38	90	145	249
Members	..	17,583	40,057	79,760	201,895
Men	..	12,628	23,118	46,895	106,796
Women	..	4,955	16,939	32,865	95,099
Other types of plans	52	59	67	74	78
Members	41,690	49,418	52,923	45,976	65,279
Men	23,868	29,832	32,906	27,020	37,358
Women	17,822	19,586	20,017	18,956	27,921

1. Registered pension plans are plans established by either employers or unions to provide retirement income to employees.
2. Hybrid plans are plans where the pension benefit is the better of that provided by defined benefit or defined contribution provisions.
3. In composite or combination plans, the pension has both defined benefit and defined contribution characteristics.
4. These plans may be for different classes of employees or one benefit type may be for current employees and the other for new employees.

Note: As of January 1.

Source: Statistics Canada, CANSIM table 280-0016.

- There were more than 19,000 private and public pension plans in Canada in 2008—60% of these plans were defined benefit plans—up from 47% of plans in 2004
- In 2008, women made up about one-half of the 4.5 million members of defined benefit pension plans.
- There were about 7,200 defined contribution plans in Canada in 2008 down from around 7,500 in 2004. The majority (59%) of defined contribution plan members were men.

Table 4 Proportion of labour force and paid workers covered by a registered pension plan, by sex, Canada, select years

	1992	1997	2002	2007
			number	
RPP[1] members				
Both sexes	5,244,703	5,088,455	5,522,563	5,908,633
Men	3,024,770	2,841,608	2,960,525	3,039,988
Women	2,219,933	2,246,847	2,562,038	2,868,645
			percentage	
Labour force				
Both sexes	36.2	33.5	33.1	32.6
Men	37.6	34.1	32.9	31.7
Women	34.4	32.7	33.3	33.7
Paid workers				
Both sexes	45.3	41.6	39.7	38.3
Men	48.3	42.9	40.2	37.7
Women	41.8	40.1	39.2	38.8

1. Registered pension plans are plans established by either employers or unions to provide retirement income to employees.

Notes: The data used from Labour Force Survey (labour force and paid workers) are annual averages to which the number of Canadian Forces members was added.

Paid workers refer to employees in the public and private sector and include self-employed workers in incorporated business (with and without paid help).

Source: Statistics Canada, Pension Plans in Canada and Labour Force Survey.

- Roughly one-third of the labour force is covered by a registered pension plan (RPP). Between 1992 and 2007, RPP coverage dropped for both men and women. Men, however, experienced a more precipitous decline than women such that by 2007 women in the labour force were slightly more likely than men to be covered by an RPP.
- Among paid workers, RPP coverage declined from about 45% in 1992 to 38% in 2007. Coverage for men who were paid workers declined by about 11 percentage points and by 3 percentage points for women over the 1992 to 2007 period.

Table 5 Registered retirement savings plan contributions, by sex, Canada, 2000 to 2008

	2000	2001	2002	2003	2004	2005	2006	2007	2008
					number				
Total RRSP[1] contributors	6,291,170	6,241,050	5,991,440	5,948,340	6,002,350	6,135,980	6,196,050	6,292,480	6,178,900
					percentage				
Men	55	55	54	54	54	54	54	54	53
Women	45	45	46	46	46	46	46	46	47
					in thousands of dollars				
Total RRSP contributions	29,280,163	28,438,914	27,072,812	27,561,305	28,788,102	30,581,252	32,350,792	34,057,715	33,314,040
					percentage				
Share of total contributions									
Men	61	62	61	62	62	62	62	61	61
Women	39	38	39	38	38	38	38	39	39
					dollars				
Median contribution	2,700	2,600	2,500	2,600	2,600	2,630	2,730	2,780	2,700
Men	3,000	3,000	3,000	3,000	3,000	3,070	3,200	3,260	3,220
Women	2,200	2,200	2,100	2,100	2,200	2,180	2,250	2,300	2,240

1. Registered retirement savings plan.
Source: Statistics Canada, CANSIM table 111-0039.

- There were approximately 6.2 million Canadians who contributed more than $33 billion to an RRSP in 2008.
- Almost half (47%) of all RRSP contributors in 2008 were women, up from 45% in 2000.
- The median RRSP contribution was $2,700 in both 2000 and 2008. However, the median contribution for men was higher than that of women over the 2000 to 2008 period. For example in 2008, the median RRSP contribution for men was $3,220 compared to $2,240 for women.
- Although women made up almost half of all RRSP contributors, their share of total contributions was lower. In both 2000 and 2008, RRSP contributions made by women made up 39% of total contributions (61% for men).

An exploration of cultural activities of Métis in Canada

by Mohan B. Kumar and Teresa Janz

Introduction

Canada is a multicultural country. One rich source of our cultural heritage comes from Aboriginal Peoples.[1] While cultural diversity can bring challenges, when we attempt to understand our own and others' cultural backgrounds it can provide tremendous opportunities for both personal growth and 'positive social evolution'.[2] A better understanding of another person's culture can broaden our understanding of other ways of 'being' in the world, and help decrease the potential for misunderstandings.

But what does 'culture' mean? In a summary of some of the research on culture, Matsumoto and Juang describe how this term is used very broadly in everyday language and research, and can refer to activities and behaviours, history or heritage, and norms or organizational structures that govern behaviour.[3] It may also touch many aspects of our lives including our food and clothing, individual and family activities, music and spirituality.

While there is no single agreed-upon definition of culture, one definition suggests culture is "a unique meaning and information system, shared by a group and transmitted across generations, that allows the group to meet basic needs of survival, pursue happiness and well-being, and derive meaning from life."[4] However, this definition fails to recognize that for many Aboriginal individuals culture cannot be defined on its own, as a separate entity, but instead culture is life itself—an all-encompassing concept.[5,6] As a result, culture may have an impact on the health and well-being of Aboriginal individuals.

One way the link between culture and well-being has been investigated is through 'cultural continuity.' The transmission of cultural heritage from one generation to another along with the means by which transmission occurs constitute cultural continuity.[7] Research on cultural continuity has indicated that culture is important because it can foster personal identity development and contribute to psychological health, preventing self-destructive and suicidal behaviours.[8,9]

To date, cultural continuity research with respect to Aboriginal people has primarily focused on First Nations communities and has been described as the connection that individuals have with their own cultural past, and ideas of their potential future self.[10] Several factors can contribute to cultural continuity, including Aboriginal language knowledge, land claims, self-government, availability of cultural facilities, and the provision of culturally appropriate education, health, police and fire services. First Nations communities that cultivate *cultural* continuity foster strong *personal* self-continuity in their youth, or the sense of personal persistence over time, which is protective against self-harm behaviours.[11,12] However, little research on cultural continuity has been done for the Métis population.

While 'culture' means many things to many people, this report explores only a few elements as they relate to the Métis population—which includes an estimated 389,785 individuals who identified themselves as Métis in the 2006 Census. For this article, cultural elements are limited to questions that were asked on the 2006 Aboriginal Peoples Survey and Métis Supplement (See "What you should know about this study"). The goal of this article is to explore current cultural activities of the Métis population, and move toward a better understating of Métis-specific cultural continuity. More specifically, this includes discussions of participation in traditional activities (e.g., hunting, fishing, trapping and gathering wild plants), arts and crafts, and attendance at Métis-specific organizations and cultural events, as well as consumption of traditional foods, and spiritual and religious practices. Aboriginal language acquisition and use are also examined.

Fishing a common activity among Métis

Historically, Métis have been involved in traditional activities such as fishing, hunting and trapping.[13,14] Métis also played a prominent role in the fur trade.[15] To this day, many Métis continue to fish, hunt and trap.[16]

Fishing is a common traditional activity among the Métis. In 2006, about 40% of the adult Métis population had fished in the last 12 months. Most Métis fished for

What you should know about this study

About the Aboriginal Peoples Survey and Métis Supplement Questionnaire

The 2006 Aboriginal Peoples Survey (APS) provides an extensive set of data about Métis, Inuit and off-reserve First Nations adults 15 years of age and over and children aged 6 to 14, living in urban, rural and northern locations across Canada. The Aboriginal Peoples Survey was conducted between October 2006 and March 2007. Personal interviews were conducted in Inuit communities, the Northwest Territories (except for Yellowknife) and in other remote areas, while telephone interviews were conducted elsewhere. The overall response rate for the Aboriginal Peoples Survey was 80.1%.

This study focuses on the Métis population 15 and older. The Métis population includes those who reported identifying as Métis (either as a single response or in combination with North American Indian and/or Inuit). Data in this study are for the off-reserve Métis population only except for those living in the three territories where the on-reserve population is included. Also not included are those living in institutions.

The APS survey was developed by Statistics Canada in partnership with the following national Aboriginal organizations: Congress of Aboriginal Peoples, Inuit Tapiriit Kanatami, Métis National Council, National Association of Friendship Centres, and the Native Women's Association of Canada. The following federal departments sponsored the 2006 APS: Indian and Northern Affairs Canada, Health Canada, Human Resources and Skills Development Canada, Canada Mortgage and Housing Corporation and Canadian Heritage.

Métis supplement

The Métis supplement was designed specifically for the Métis population and it was given to people 15 years of age and older who identified themselves as Métis and/or who have Métis ancestry. The supplemental questionnaire was developed by Métis organizations in cooperation with Statistics Canada. This supplemental survey asks a wide variety of questions regarding family background, child welfare, social interaction, and health (for more information, please see the *Aboriginal Peoples Survey 2006 and Métis Supplement*, and Aboriginal Peoples Survey, 2006: Concepts and Methods Guide.

pleasure (87%) and/or for food (74%). Young Métis were more likely than their older counterparts to have fished. For example, 46% of 15- to 19-year-old Métis fished in the 12 months preceding the survey, compared to 24% of Métis 65 years and older (Chart 1). Métis women and Métis living in urban areas were less likely to have participated in this activity compared to men or those living in rural areas.

In 2006, 15% of all adult Métis had hunted in the previous 12 months and most stated that they hunted for food (89%) and/or for pleasure (64%). There were differences across regions and gender. About one-quarter of rural Métis hunted compared to 10% of urban Métis. About one in four Métis men had hunted compared to less than one in ten Métis women (data not shown).

While Métis in the past were extensively involved in trapping, in 2006 only 2% of Métis had trapped in the previous 12 months. There were no significant age differences among Métis who trapped in the last 12 months (Chart 1). Trapping was more likely to be carried out by Métis men and those living in rural areas. Among Métis who participated in trapping, their reasons included doing so for pleasure (52%), for food (45%), and for commercial purposes (39%).

Gathering wild plants

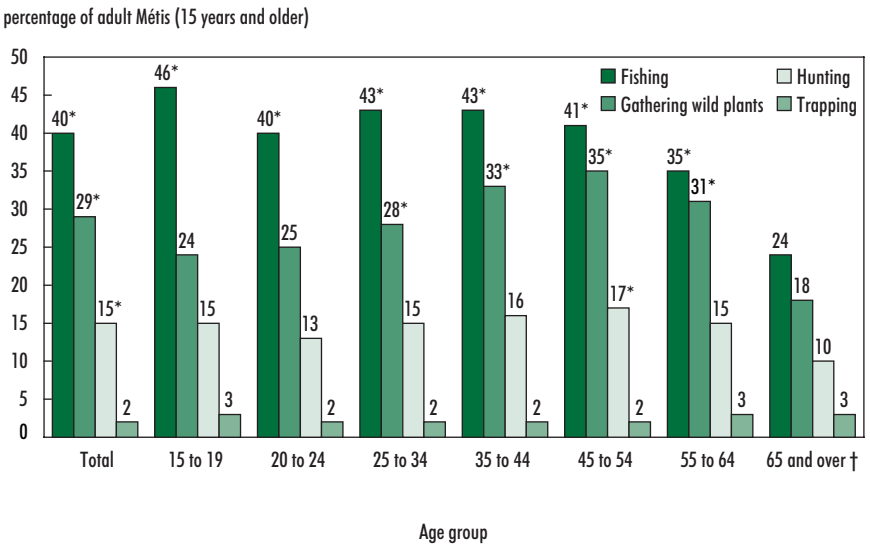
In 2006, nearly three in ten (29%) Métis indicated they had gathered wild plants (e.g., berries, wild rice or sweetgrass) in the previous 12 months. Those 65 and over (18%) were less likely to gather such vegetation compared to those younger (see Chart 1). Not surprisingly, Métis living in rural areas were more likely to have gathered wild vegetation compared to urban Métis (41% versus 25%). Métis men and women were equally likely to state that they had gathered wild vegetation.

Métis living in rural areas more likely to consume traditional foods than those living in urban areas

Consumption of traditional foods represents important ties to social and cultural aspects of life among Aboriginal people.[17,18] Among Métis, traditional foods and related activities have conventionally engendered stronger ties to Métis culture and community.[19] In the past, the sharing of wild meat and staple foods was commonplace in Métis communities.[20]

In 2006, almost one in five Métis (17%) reported that they "often" consumed land-based animals (e.g. moose, caribou, bear, deer and buffalo), while 35% reported consuming such animals "a few times"

Chart 1 Fishing, the most common traditional activity among adult Métis in 2006



† reference group

* statistically significant difference from reference group at $p < 0.05$ for the same activity

Source: Statistics Canada, Aboriginal Peoples Survey, 2006.

in the year preceding the survey (Table 1).

Métis men (21%) were more likely to eat land-based animals "often" compared with women (14%). Rural-dwelling Métis (29%) were more than twice as likely to regularly eat land-based animals compared to urban Métis (13%). This is in line with the finding that Métis in rural areas are more likely to hunt compared to urban Métis.

Métis living in the Northwest Territories, Yukon, and Newfoundland and Labrador were more likely to have consumed land-based animals "often" compared to their counterparts in other provinces (Table 1).

Overall, about one in five Métis stated that they often consumed fresh water fish. Frequent consumption of fresh water fish was higher among older age groups and those living in rural areas. Similarly, older Métis consumed salt water fish more often than their younger counterparts.

In 2006, about 4% of Métis stated that they often consumed game birds and a smaller percentage (2%) often

Table 1 Percentage of Métis who consume traditional foods "often", Métis population aged 15 and over, by province, 2006

	Land-based animals[1]	Fresh water fish	Salt water fish	Game birds	Small game	Berries or other wild vegetation	Bannock
	percentage						
Canada †	**17**	**19**	**13**	**4**	**2**	**17**	**12**
Newfoundland and Labrador	32*	28*	35*	15*E	12*E	21	6*E
Prince Edward Island	x	x	x	x	x	x	x
Nova Scotia	10*E	13E	40*	x	F	26*	x
New Brunswick	13E	13E	29*	x	x	28*	x
Quebec	16	28*	23*	9*	3*E	23*	4*
Ontario	16	23*	11	6	2E	22*	5*
Manitoba	16	20	6*	4	2E	12*	16*
Saskatchewan	24*	19	5*	4	3E	16	25*
Alberta	17	14*	10*	2*	1*E	13*	18*
British Columbia	15	15*	22*	1*E	x	16	9*
Yukon	41*	32*E	14E	x	x	23E	23*E
Northwest Territories	44*	33*	4*E	12*E	6*E	22	31*

† reference group

* statistically significant difference from reference group at $p < 0.05$

1. Land-based animals such as moose, caribou, bear, deer, buffalo, etc.

Source: Statistics Canada, Aboriginal Peoples Survey, 2006.

consumed small game like rabbit or muskrat. Not surprisingly, those living in rural areas were more likely to have consumed these animals "often". For example, about one in ten Métis living in rural areas often consumed game birds compared with 3% of those living in urban areas.

In the year prior to the survey, nearly one in five (17%) Métis had often consumed berries or other wild vegetation (e.g., wild rice), and about one in ten (12%) had often consumed bannock or fried bread (Table 1).

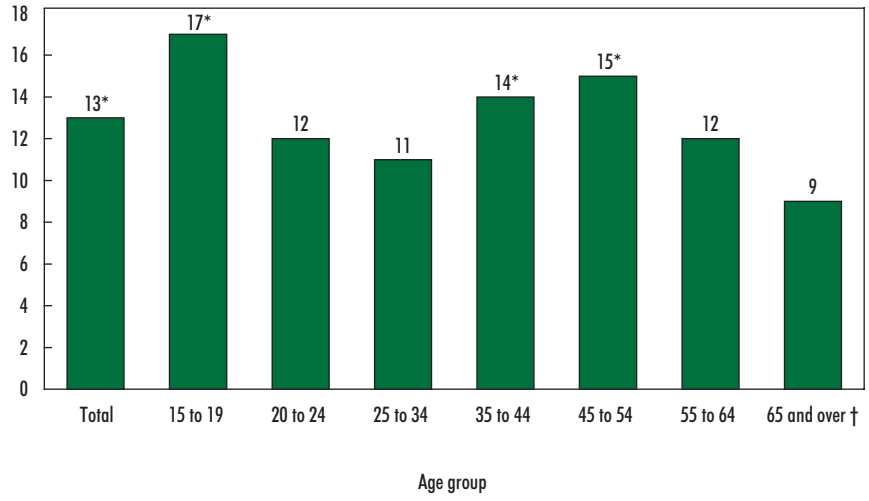
Young Métis more likely to be involved in traditional arts and crafts than older Métis

Arts and crafts have traditionally been a part of cultural and economic activities undertaken by Métis.[21] These have included making clothing, needlework, toys,[22] beadwork, quillwork and embroidery.[23]

In 2006, 13% of all adult Métis (15 years and older) were involved in traditional art or craftwork. There were significant differences across the age groups. Younger Métis were more likely to be involved compared to older Métis. For instance, Métis between the ages of 15 and 19 years were more likely to be involved in creating traditional arts and crafts (17%) than those who were 65 years and older (9%) (Chart 2).

The most common types of art or craftwork reported by Métis included beadwork (33%), painting (18%) and leatherwork (14%). In general, Métis women were more likely to be involved in arts and crafts activities than Métis men (16% versus 10%). However, some of these activities are highly gendered so it is not surprising that there were significant gender differences in certain types of activities. Métis women were more likely to be involved in beadwork (44% versus 14%) and sewing (11% versus 5%) than men. On the other hand, men were more likely to carve (18% versus 4%) and do woodwork (12% versus 3%) than women. Gender-specific differences were not seen for leatherwork, pottery, weaving, sculpting, painting or embroidery.

Chart 2 One in eight adult Métis involved in traditional art or craftwork in 2006



† reference group
* statistically significant difference from the reference group at $p < 0.05$
Source: Statistics Canada, Aboriginal Peoples Survey, 2006.

Attendance at Métis cultural events more common in the Northwest Territories, Manitoba and Saskatchewan

Many Aboriginal people maintain connections with their spirituality, traditions and culture through participation in powwows, sweat lodges, social and political Aboriginal organizations, and other traditional activities. While there is some evidence of Métis practices to maintain cultural,[24,25] social, and political ties[26,27] through celebrations (Métis Nation Day, Chivaree, Louis Riel Day[28]), little information is available for Métis across Canada today. To begin to address this knowledge gap, the following sections explore Métis participation in cultural, social and political organizations, including religious and spiritual practices.

In 2006, about one-quarter (26%) of all Métis in Canada reported attending a Métis event (cultural event, festival pilgrimage, or Métis artist performance) in the previous 12 months. One in five (18%) Métis had attended a Métis event five or more years ago. In contrast, about 30% of all Métis in Canada had never attended a Métis event. Attendance was higher in some jurisdictions. Just over 40% of all Métis living in the Northwest Territories had attended a Métis cultural event in the last 12 months compared to about 35% in Saskatchewan and Manitoba.

Those age 35 and older more likely to be members of Métis organizations

In 2006, (17%) of Métis aged 15 and older indicated that they were members of Métis cultural, social or political organizations. Métis adults were more likely to be members if they were 35 years of age and older (20%) compared to those between 15 and 34 years of age (12%). Likewise, Métis living in rural areas were more likely to be members of Métis organizations compared to urban Métis (data not shown). Among members, 27% regularly participated in activities or meetings for these organizations (Chart 3). Those aged

25 to 34 were the least likely of all the age groups to regularly participate (15%).

Many Métis adults very or moderately spiritual or religious

People may also participate in spiritual or religious activities in order to feel connected to their community. Spirituality and religiosity are a large part of maintaining optimal holistic health and well-being among many Métis.[29] Many Métis have combined traditional Aboriginal spiritualism and Roman Catholicism.[30] For example, about one in five Métis (21%) consider themselves to be "very" spiritual or religious and another (43%) consider themselves to be "moderately" spiritual or religious. At the other end of the scale, about one in five Métis do not consider themselves to be very spiritual or religious, and another one in ten indicated they were not at all spiritual or religious.

The spiritual and religious practices of Métis are diverse. For example, some Métis maintain their religious or spiritual well-being through prayer (36%), attending church (30%), meditation (20%), talking with elders (15%), participating in pilgrimages (5%), or attending sweat lodges 4%. Just over 20% of all Métis used some "other" means of maintaining religious/spiritual well-being.

Cree the predominant Aboriginal language spoken among Métis

Aboriginal language knowledge has been used as one measure of cultural continuity. The Métis people from the Prairies have traditionally spoken many First Nation languages and the distinct language, Michif, which is a composite language derived from French and Cree.[31,32] The use of these languages is said to help foster the relationship between Métis and the land, water and food.[33]

According to the 2006 Aboriginal Peoples Survey (APS), 10% of Métis aged 15 years and older spoke an Aboriginal language. All Métis who spoke an Aboriginal language also spoke at least one official language: 88% spoke English, 1% French, and 11% both English and French.

While only a minority of Métis in 2006 spoke an Aboriginal language, many viewed learning, re-learning and keeping their Aboriginal language as important. In 2006, 48% of Métis adults indicated that learning, re-learning or keeping their Aboriginal language was "very" or "somewhat" important to them. Many Métis (39%) also indicated that it was "very" or "fairly" important for their children to learn an Aboriginal language.

Among the Métis who spoke an Aboriginal language, Cree was most predominantly spoken at 64%, followed by Ojibway (10%) and Michif (7%).

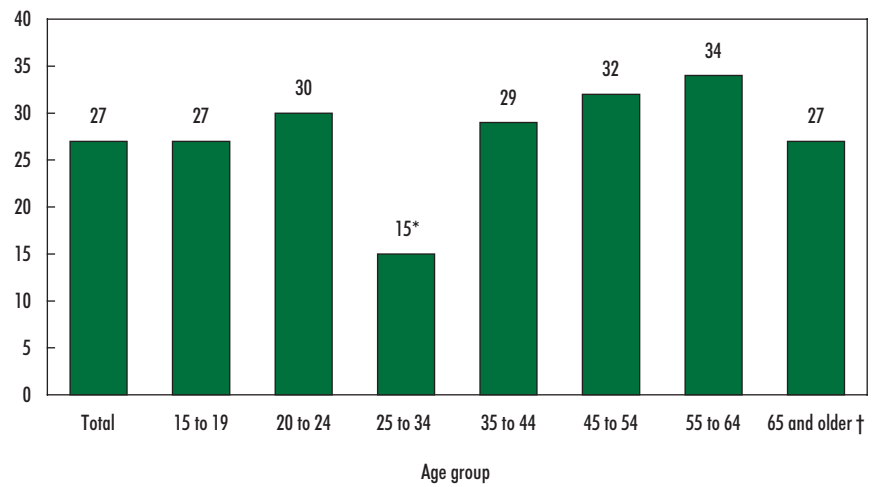
Nearly one-quarter of Métis in Saskatchewan speak Aboriginal languages

In 2006, the largest proportion of Métis adults who spoke an Aboriginal language was in Saskatchewan (24%), significantly more than the 16% in Alberta. In Manitoba and British Columbia, about the same proportion of Métis adults spoke an Aboriginal language (8% and 6% respectively).

There were also significant regional differences in the Aboriginal languages spoken by Métis across Canada (Chart 4). For example, almost all (87%) Alberta Métis who could speak an Aboriginal language spoke Cree, while in Saskatchewan and British Columbia more than six in ten spoke Cree. In Manitoba, there were no statistically significant differences in the likelihood of Métis speaking Cree (48%) or Ojibway (32%). In Ontario, the predominant language among those who could speak an Aboriginal language was Ojibway (46%) compared to 17% who spoke Cree.

In 2006, those living in urban and rural areas were equally likely to report that they could speak an Aboriginal language. However, Métis living in rural areas who spoke an Aboriginal language were more than twice as likely to report that they

Chart 3 About one-third of those who were members of Métis cultural, social or political organizations participated regularly[1] in meetings or activities in 2006



† reference group

* statistically significant difference from reference group at $p < 0.05$

1. Regular participation is defined as participating in meetings or activities "at least once a week", " at least once a month" or "at least 3 or 4 times a year."

Source: Statistics Canada, Aboriginal Peoples Survey, 2006.

Map Aboriginal languages reported by Métis who speak an Aboriginal language, Métis population of Canada aged 15 and over, 2006

† reference group
* statistically significant difference from reference group at $p < 0.05$
Notes: Percentages for Aboriginal languages are not presented for the Atlantic provinces or the Yukon Territory because the samples were too small.
Percentage may not add to 100 because some categories were suppressed to protect confidentiality.
Source: Statistics Canada, Aboriginal Peoples Survey, 2006.

spoke that language "very well" compared to those living in urban areas (32% versus 14%).

Older Métis more likely to speak an Aboriginal language, and likely to speak it well

In general, among Métis adults under the age of 65, around one in ten stated that they spoke an Aboriginal language. Métis over 65 years of age were more likely to speak an Aboriginal language (16%).

Among younger Métis (15 to 19 years) who could speak an Aboriginal language, 18% reported speaking it "very well" or "relatively well." A significantly higher percentage of Métis 65 and older who could speak an Aboriginal language said they could speak "very well" or "relatively well" (67%).

Summary

Canada's Aboriginal people have a rich and culturally diverse heritage. Examining some aspects of Métis culture can provide opportunities to better understand and gain an appreciation for the culture of a distinct group of people within the Aboriginal population.

This article explores potential Métis cultural continuity indicators like participation in traditional activities including hunting, fishing and trapping, and Aboriginal language knowledge.

Among traditional hunting and gathering methods, fishing was the most predominant activity. About 40% of Métis had fished during the year leading up to the survey and about 10% had hunted.

Métis also participated in other traditional activities, such as gathering wild vegetation, and creating traditional arts and crafts.

Beadwork and painting were the more popular traditional arts and crafts among Métis.

About one-quarter of the adult Métis population had attended a Métis cultural or social event and about 20% were members of Métis cultural, social or political organizations.

Across Canada, one in ten Métis spoke an Aboriginal language. The most commonly spoken Aboriginal language for Métis varied by region: in Alberta, Saskatchewan and British Columbia it was Cree; in Manitoba it was Cree and Ojibway; and in Ontario it was Ojibway.

The findings also highlight that any discussion of 'common' cultural activities has to occur in a context that considers the individual's background. For example, Métis who created traditional arts and crafts were more likely to be young, while older Métis were more likely to be members of Métis organizations and speak an Aboriginal language. In addition, a more in-depth exploration of arts and crafts indicated that some of these activities were gendered—with beadwork being common among women, and carving and woodwork common among men.

Mohan B. Kumar and **Teresa Janz** are analysts with the Social and Aboriginal Statistics Division. **Mohan B. Kumar** is also a research officer at the Métis Centre of the National Aboriginal Health Organization.

1. There are three distinct groups of Aboriginal peoples in Canada, as defined by the *1982 Constitution Act*. These are the Indian, Inuit and Métis peoples of Canada. According to the 2006 Census, an estimated 389,785 people identified themselves as Métis, accounting for one-third (33%) of Aboriginal people.
2. Matsumoto, D. and Juang, L. (2008). *Culture and Psychology*. 4th edition. Belmont, CA. Thomson Wadsworth.
3. Ibid.
4. Matsumoto and Juang. (2008).
5. Louis Riel Institute. (2005). *Culture: Strategic Directions 2005-2008*. http://www.louisrielinstitute.com/culture/ (accessed January 10, 2010).
6. Vizina, Y. (2008). *Métis Culture*. Regina. Saskatchewan council for archives and archivists. http://scaa.sk.ca/ourlegacy/exhibit_metisculture (accessed January 10, 2009).
7. Eggan, D. (1956). "Instruction and affect in Hopi cultural continuity." *Southwestern Journal of Anthropology*. 12, 347-366.
8. Chandler, M.J. and Lalonde, C. (1998)."Cultural continuity as a hedge against suicide in Canada's First Nations." *Transcultural Psychiatry*. 35, 191-219.
9. Hallett, D., Chandler, M.J. and Lalonde, C.E. (2007). "Aboriginal language knowledge and youth suicide." *Cognitive Development*. 22, 392-399.
10. Chandler, M.J., Lalonde, C.E., Sokol, B.W. and Hallett, D. (2003). "Personal persistence, identity development, and suicide: A study of Native and Non-native North American adolescents.' *Monogr Soc Res Child Dev.* 68, vii-viii, 1-130. Discussion 131-138.
11. Chandler and Lalonde. (1998).
12. Hallett, Chandler and Lalonde. (2007).
13. Stranger, S. and Daniels, D. (1977). Lifestyles: *Manitoba Indians*. Winnipeg. Manitoba Indian Cultural Education Centre.
14. Pelletier, E. (1977). *A Social History of the Manitoba Métis*. Winnipeg. Manitoba Métis Federation Press.
15. Ray, A.J. (1998). *Indians in the Fur Trade: Their Roles as Trappers, Hunters, and Middlemen in the Lands Southwest of Hudson Bay, 1660-1870*. Toronto. University of Toronto Press.
16. Edge, L. and McCallum, L. (2006). *Métis Identity: Sharing Traditional Knowledge and Healing Practices at Métis Elders' Gatherings*. Pimatisiwin 4 #2.
17. Richmond, C. A. M. and Ross, N. A. (2009). *The Determinants of First Nation and Inuit health: A Critical Population Health Approach*. Health and Place, *15*(2).
18. Freeman, M.M. R. and Canadian Circom-Polar Institute (2003). *Food for Thought (and Other Important Considerations)*. Paper presented at the conference Indigenous Peoples' Contributions to Understanding Global Environmental Change. Montreal. McGill University.
19. Edge and McCallum. (2006).
20. Hourie, A., Barkwell, L., Carriere-Acco, A. and Dorion, L. (2006). "Métis Foods and Food Preparation." *Métis Legacy II*. L. Barkwell, L.M. Dorion and A. Hourie (eds.). Saskatoon. Gabriel Dumont Institute and Pemmican Publications.
21. Barkwell, L. (2006). "Making a living." *Métis Legacy II*. L. Barkwell, L.M. Dorion and A. Hourie (eds.). Saskatoon. Gabriel Dumont Institute and Pemmican Publications.
22. Heritage Community Foundation. (2009). *The Métis in Alberta*. http://www.albertasource.ca/METIS/ENG/culture_lifeways/culture_lifeways_arts_crafts.htm (accessed August 10, 2009).
23. Barkwell. (2006).
24. Hourie, Barkwell, Carriere-Acco,and Dorion. (2006).
25. Barkwell, L. and Hourie, A. (2006). "*Métis Games.*» *Métis Legacy II*. L. Barkwell, L.M. Dorion and A. Hourie (eds.). Saskatoon. Gabriel Dumont Institute and Pemmican Publications.
26. Edge and McCallum. (2006).
27. Dorion, L. and Prefontaine, D.R. (2001). "Deconstructing Métis historiography: Giving voice to the Métis people." *Métis Legacy*. L.J. Barkwell, L. Dorion and D.R. Prefontaine (eds.) Louis Riel Institute and Gabriel Dumont Institute of Métis Studies and Applied Research. Manitoba. Pemmican Publications Inc. 22-25.
28. Barkwell, L. (2006). "Métis holidays and celebrations." *Métis Legacy II*. L. Barkwell, L.M. Dorion and A. Hourie (eds.). Saskatoon. Gabriel Dumont Institute and Pemmican Publications.
29. Barkwell, L., Prefontaine, D.R. and Carriere-Acco, A. (2006). "Métis spirituality." *Métis Legacy II*. L. Barkwell, L.M. Dorion and A. Hourie (eds.). Saskatoon. Gabriel Dumont Institute and Pemmican Publications.
30. Barkwell et al. (2006).
31. Dorion and Prefontaine. (2001).
32. Bakker, P. (2001). "*The Michif Language of the Métis.*" *Métis Legacy*. L.J. Barkwell, L. Dorion and D.R. Prefontaine (eds.). Manitoba. Pemmican Publications Inc., Louis Riel Institute and Gabriel Dumont Institute of Métis Studies and Applied Research. 177-179.
33. Edge and McCallum. (2006).

A portrait of couples in mixed unions

by Anne Milan, Hélène Maheux and Tina Chui

Introduction

As Canada's population continues to become more ethnoculturally diverse, there is greater opportunity for individuals to form conjugal relationships with someone from a different ethnocultural background. These mixed unions, either marital or common-law, can be measured in many ways. For example, mixed unions may refer to spouses or partners with differing sociodemographic or cultural characteristics such as age, education, religion or ethnic origin. In this study, a mixed union[1] is based on one of two criteria: either one member of a couple belongs to a visible minority group and the other does not, or the two spouses or partners belong to different visible minority groups.

Using data primarily from the 2006 Census of Population, this study examines the characteristics of mixed union couples in Canada (see "What you should know about this study" for concepts, definitions and details). The prevalence of mixed unions may vary for particular visible minority groups and according to factors such as immigration status, generation status and birthplace. Sociodemographic attributes such as age, sex, marital status and place of residence within Canada, as well as socio-economic characteristics including education, labour force participation and family income will be explored in order to see if they are associated with being in a mixed union. Possible implications of mixed unions include linguistic transfer and trends related to children living in mixed families. Studying mixed unions is important not only because these relationships reflect another aspect of the diversity of families in Canada today, but also because of their potential impact in terms of social inclusion and identification with one visible minority group or more, particularly for subsequent generations.

About 4% of all couples are mixed unions

According to the 2006 Census, 3.9% of the 7,482,800 couples in Canada

What you should know about this study

Visible minority status

Visible minority status is self-reported and refers to the visible minority group to which the respondent belongs. The *Employment Equity Act* defines visible minorities as "persons, other than Aboriginal peoples, who are non-Caucasian in race or non-white in colour." Under this definition, regulations specify the following groups as visible minorities: Chinese, South Asians, Blacks, Arabs, West Asians, Filipinos, Southeast Asians, Latin Americans, Japanese, Koreans and other visible minority groups, like Pacific Islanders.

Mixed couples refer to common-law or marital relationships comprised of one spouse or partner who is a member of a visible minority group and the other who is not, as well as couples comprised of two different visible minority group members. Mixed couples include both opposite-sex and same-sex couples unless indicated otherwise.

Data used are primarily from the 2006 Census of Population, with comparisons to 2001 data where appropriate. Throughout the paper, both person-level and couple-level data are used.

Person-level data are used for characteristics of individuals in mixed unions, such as age, sex, educational level, immigrant status and mother tongue.

Couple-level data are more appropriate when analyzing characteristics of the union, for instance, whether it is a marriage or common-law relationship or if there are children present in the home.

Persons of multiple visible minority group status are individuals who reported belonging to more than one visible minority group by checking two or more mark-in circles on the census questionnaire, e.g., Black and South Asian.

were mixed unions. Mixed unions between one visible minority group member and one non-member or between persons belonging to two different visible groups accounted for 289,400 couples overall. In comparison, mixed unions represented 3.1% of all couples in 2001 and 2.6% in 1991. Between 2001 and 2006, mixed unions grew at a rapid pace (33%), more than five times the growth for all couples (6.0%). There are several reasons why the proportion of mixed unions may be increasing. For example, there could be more mixed unions as people meet, interact and form relationships in many different social, educational or work-related settings. The growth of mixed unions may also be due to an increasing number of people who belong to visible minority groups, resulting in greater potential for people to meet spouses or partners from outside their group.

Visible minority population increased more than threefold in 25 years

The increase in mixed unions in Canada may be at least partially attributed to the growth of the visible minority population. The 2006 Census counted 5.1 million persons who were members of visible minority groups, representing more than 16% of the population of Canada.[2] This figure is more than three times higher than in 1981, when the visible minority population accounted for 4.7% of Canada's total population. The changing face of Canada can be largely attributed to the greater proportion of immigrants coming from regions other than Europe. For example, 84% of immigrants who arrived in Canada in the five-year period between 2001 and 2006 were born in non-European countries, up from 68% of recent immigrants counted 25 years earlier.

Given that most of the Canadian population was not part of a visible minority in 2006 (84%), the majority of mixed unions were between persons who belonged to a visible minority group paired with persons who were not a visible minority group member (247,600 or 3.3% of all couples in 2006), a growth of 31% since 2001. An additional 41,800 couples were comprised of members of two different visible minority groups, accounting for 0.6% of all couples, up almost 50% from five years earlier.

Japanese have highest proportion of out-group pairings

While nearly one-quarter (24%) of all couples comprised of at least one visible minority group member were mixed in 2006, the proportion varied according to the particular visible minority group. There are many reasons that could explain the variation in mixed unions among the visible minority groups, like the size of the group, which could affect the chance of its members finding a partner with the same background, the group's immigration history as well as other characteristics. The share of couples who were mixed increased slightly for some visible minority groups from 2001 to 2006, while the ranking of the proportion of mixed couples by visible minority group membership remained unchanged for both census years.

Japanese had the highest proportion marrying or partnering outside of their visible minority group, as shown in the 2006 Census. Indeed, about three-quarters (75%) of the 29,700 couples where at least one person in the couple was Japanese involved pairings with a non-Japanese person. As was noted in earlier research,[3] this high proportion may be at least partially due to the long duration of residence for many Japanese in Canada, as well as the low overall number of Japanese, which could increase interaction with persons outside of their group.

Table 1 Out-group pairing by visible minority group, 2006

	Couples		
	Total	Mixed union	Same visible minority group
	number	percentage	
Visible minority group			
All visible minority groups[1]	**1,214,400**	**23.8**	**76.2**
Japanese	29,700	74.7	25.3
Latin American	85,200	47.0	53.0
Black	136,000	40.6	59.4
Filipino	107,400	33.1	66.9
Southeast Asian	58,100	31.1	68.9
Arab/West Asian	105,700	25.0	74.9
Korean	34,800	19.5	80.5
Chinese	321,700	17.4	82.6
South Asian	327,200	12.7	87.3
Multiple groups or n.i.e.[2]	50,400	58.4	41.6

1. The number of couples by specific visible minority group does not sum to the total because if the two persons in a couple belong to two different visible minority groups, these couples are counted in each group.
2. Belonging to multiple visible minority groups means that respondents reported more than one visible minority group by checking two or more mark-in circles, e.g., Black and South Asian. Less common visible minority groups are reported in the visible minority n.i.e. (not included elsewhere) category. This category includes respondents who reported a write-in response such as Guyanese, West Indian, Kurd, Tibetan, Polynesian and Pacific Islander.

Source: Statistics Canada, Census of Population, 2006.

Latin Americans (47%) and Blacks (41%) followed Japanese with the highest proportions of couples involving out-group pairings. About one-third of couples involving a Filipino (33%) were married or living common-law outside their visible minority group. The proportions of mixed unions among Southeast Asians (31%), Arabs or West Asians (25%) or Koreans (19%) ranked somewhat in the middle of all visible minority groups (Table 1).

The two largest visible minority populations in Canada had among the lowest proportions married or partnered outside their groups. In 2006, there were 1.3 million South Asians and 1.2 million Chinese living in Canada.[4] However, because the South Asian population includes a higher number of children under the age of 15 compared to the Chinese population, when considering the adult population (those aged 15 and over) only, Chinese becomes the largest visible minority group. With more than 1 million Chinese in this age group, they also had one of the lowest proportions of mixed unions outside their group (17%).

South Asians aged 15 and older comprised the second largest visible minority group and were the least likely to form couples outside their group. Only about one in eight couples (13%) involving a South Asian person also included a non-South Asian partner or spouse. Given the size of the Chinese and South Asian populations, there might be more opportunities to establish dynamic communities which would result in a greater likelihood to meet, interact and develop conjugal relationships with someone from the same visible minority group.

Although Chinese persons had a relatively low proportion that were married or living common-law outside their group, numerically there were more Chinese spouses or partners in mixed unions due to the sheer size of the Chinese population in Canada. In 2006, there were almost 56,000 Chinese paired with a non-visible minority or another visible minority group member, followed closely by Blacks (55,200). In contrast, couples comprised of one Japanese person had the highest proportion of out-group marriage or partnership, but this accounted for only 22,200 Japanese due to the small size of this population group. The group with the lowest number of persons in mixed unions was Koreans (6,800) (Table 2).

Taken as a whole, men and women who belonged to visible minority groups and were in couples were equally likely to be in a mixed union couple. However, within the various minority groups, there were some differences. For example, Arab or West Asian, Black or South Asian men who were in couples had higher proportions of mixed unions compared to women from these groups. In 2006, there were more than twice as many Arab or West Asian married or partnered men who were paired outside their group (19%) as there were women (9%). Similarly, three in ten Black men in couples were in mixed unions as were two out of ten Black women. This supports research out of the United States that

Table 2 Persons in couples and in mixed unions by visible minority group, 2006

	Persons				
	Total	In a couple		In a mixed union	
	number	number	percentage	number	percentage
Visible minority group					
All persons belonging to visible minority groups	**3,922,700**	**2,181,200**	**55.6**	**331,300**	**15.2**
Chinese	1,005,600	587,500	58.4	56,000	9.5
Black	562,100	216,800	38.6	55,200	25.5
South Asian	957,600	612,800	64.0	41,500	6.8
Latin American	244,300	130,300	53.3	40,000	30.7
Filipino	320,900	179,200	55.9	35,600	19.8
Arab/West Asian	321,800	185,000	57.5	26,500	14.3
Japanese	66,400	37,200	56.0	22,200	59.7
Southeast Asian	184,600	98,200	53.2	18,100	18.4
Korean	114,600	62,800	54.8	6,800	10.8
Multiple groups or n.i.e.[1]	144,700	71,400	49.3	29,400	41.3

1. Less common visible minority groups are reported in the visible minority N.I.E. (not included elsewhere) category. This category includes respondents who reported a write-in response such as Guyanese, West Indian, Kurd, Tibetan, Polynesian and Pacific Islander. Belonging to multiple visible minority groups means that respondents reported more than one visible minority group by checking two or more mark-in circles, e.g., Black and South Asian.

Source: Statistics Canada, Census of Population, 2006.

has found that Black men were more frequently in mixed union couples than Black women.[5]

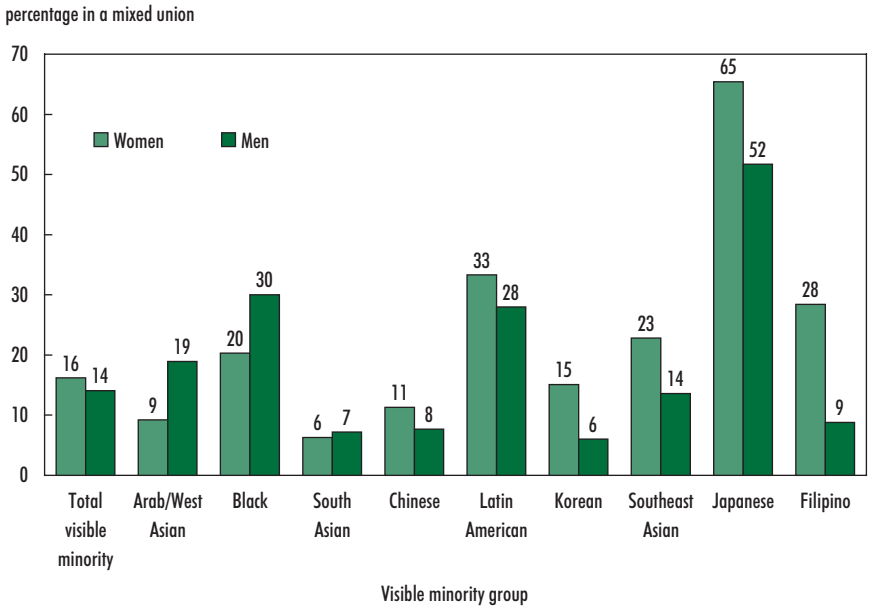
Filipino, Korean, Southeast Asian, Japanese, Chinese or Latin American women in couples accounted for a higher proportion of spouses or partners in mixed unions than did men from these visible minority groups. There were more than three times as many married or partnered Filipino women in mixed unions (28%) as there were Filipino men (9%). For Japanese, nearly two-thirds of Japanese women in couples were in mixed unions while this was the case for over one-half (52%) of men from this visible minority group (Chart 1).

Mixed unions higher for Canadian-born than foreign-born visible minority groups

Since people tend to migrate as adults, they may have already formed unions by the time they immigrate to Canada. Individuals born in Canada, on the other hand, would be more likely to form unions in this country. As such, Canadian-born visible minorities in couples had a higher proportion in mixed unions than their foreign-born counterparts. In 2006, among Canadian-born visible minorities in couples, 56% had a partner or spouse who was either a non-visible minority or was a member of a different visible minority group compared to 12% for those who were foreign-born (Table 3).

The proportion of visible minorities in couples that were mixed was higher for the Canadian-born compared to the foreign-born for each visible minority group, but there was some variation across groups. More than two-thirds of married or partnered Canadian-born Japanese were in mixed unions (69%), while this was the case for one-half (50%) of all Japanese in couples who were born outside the country. In fact, 48% of Japanese who were born in Japan and were in couples had formed an out-group conjugal union. In contrast, over one-half (54%) of Chinese in couples who were born in Canada were in mixed

Chart 1 Higher proportion of Arab or West Asian, Black and South Asian men in couples were in mixed unions compared to women from these groups



Source: Statistics Canada, Census of Population, 2006.

Table 3 Persons in mixed unions by place of birth and visible minority group, 2006

	Persons in a mixed union		
	Total	Born in Canada	Born outside Canada
	percentage		
Visible minority group			
All visible minority groups	**15.2**	**55.6**	**12.1**
Japanese	59.7	68.8	50.0
Latin American	30.7	56.1	29.8
Black	25.5	63.0	18.1
Filipino	19.8	63.5	18.0
Southeast Asian	18.4	58.5	17.2
Arab/West Asian	14.3	40.5	13.1
Korean	10.8	62.6	9.2
Chinese	9.5	53.7	6.2
South Asian	6.8	34.7	5.5
Multiple groups or n.i.e.[1]	41.3	76.0	37.3

1. Belonging to multiple visible minority groups means that respondents reported more than one visible minority group by checking two or more mark-in circles, e.g., Black and South Asian. Less common visible minority groups are reported in the category called visible minority n.i.e. (not included elsewhere). This category includes respondents who reported a write-in response such as Guyanese, West Indian, Kurd, Tibetan, Polynesian and Pacific Islander.

Source: Statistics Canada, Census of Population, 2006.

unions in 2006, whereas this was true for 6% of Chinese born outside the country. Among married or partnered Chinese who were born in China, only 3% were in mixed unions. Similarly, about one-third of Canadian-born South Asians in couples were in mixed unions, while 3% of South Asians born in South Asia were in mixed unions. Among Canadian-born Blacks in couples, 63% were in mixed unions while this was true for 17% of Blacks in couples born in the Caribbean and Bermuda, and 13% of African-born Blacks (Table 3).

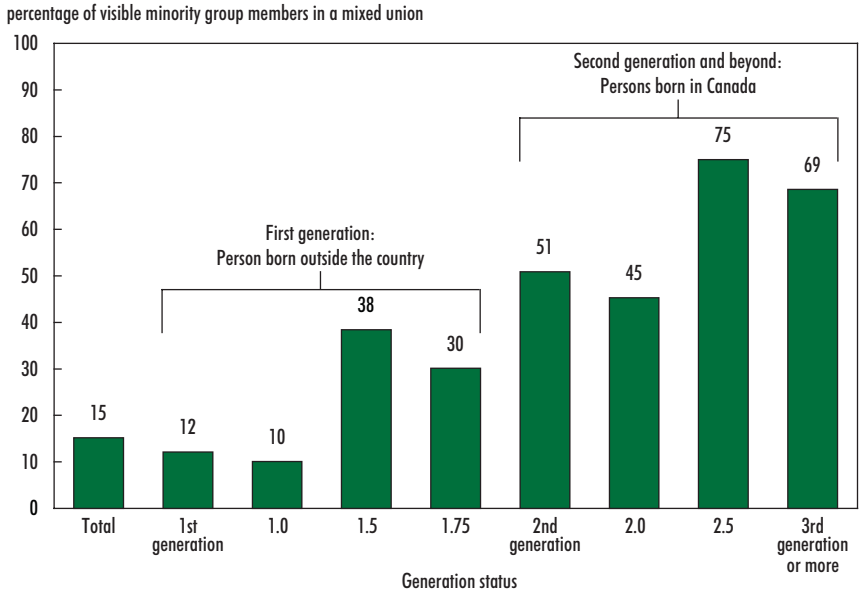
Generational status and mixed unions

Generation status refers to the number of generations that individuals and their families have been in Canada and affects the degree to which these persons participate in mixed unions.[6] Since individuals whose history in Canada could be traced back at least three generations made up the majority of the total population, the share of mixed unions decreased with each subsequent generation, that is, 7.5% of first-generation immigrants were in mixed unions, falling to 5.3% for the second generation and to 1.9% for the third or higher generation. At first glance, these results differ from a study of Asian couples in the United States and Canada which found that mixed unions were more likely among the second (or higher) generation,[7] as well as a study conducted in the Netherlands which found a higher likelihood of out-group marriage among the second generation.[8] It should be noted, however, that the decrease in the proportion of persons in mixed couples by generation status for the total population in couples is a function of the majority of this group not belonging to a visible minority group. When only the married or partnered visible minority population is considered, the proportion of persons in mixed unions increases from 12% for the first generation (meaning persons born outside of Canada) to over one-half (51%) for the second generation (meaning these are persons born in Canada but with at least one parent born outside Canada). Finally for persons who are third generation or higher (meaning they, as well as both parents, were born in Canada), more than two-thirds (69%) of persons who belonged to a visible minority group and were in couples in 2006 were part of a mixed union. Consequently, a longer duration of residence in Canada does seem to be associated with a higher proportion of being in a mixed union (Chart 2).

For persons belonging to specific visible minority groups, the overall trend was to have a higher proportion of persons in couples that were mixed for the second and higher generations compared to the first generation. For example, among first-generation Chinese, 6.2% of persons in couples in 2006 were in mixed unions, rising to over one-half (51%) for second-generation Chinese, and to two-thirds for persons in the third or higher generation (67%). Roughly one-half of first- and second-generation Japanese who were in couples were in mixed unions, increasing dramatically to 88% for individuals who were third generation or higher.

Since the census does not collect information on timing of union formation, it is not possible to determine whether these mixed unions began prior to entry into Canada for immigrants or subsequent to their arrival. However, age at immigration can provide an approximation as to whether foreign-born visible minorities immigrated to Canada while they were still children. Consequently, individuals who spent more of their childhood and adolescence in Canada may be more likely to form out-group conjugal relationships. Combining generation status and age at immigration shows a general trend for immigrants who entered Canada at 12 years of age or younger. These individuals had a higher percentage who were in mixed unions compared to those who arrived when they were 12 years of age or older. When the birthplace of the parents of persons born in

Chart 2 Longer history in Canada was associated with higher proportion of persons in mixed unions



Note: 1.0 = more than 12 years of age at immigration; 1.5 = between 6 and 12 years of age at immigration; 1.75 = less than 6 years of age at immigration; 2.0 = no parents were born in Canada; 2.5 = only one parent was born in Canada.
Source: Statistics Canada, Census of Population, 2006.

Canada was considered, there was a higher percentage of persons in mixed unions when only one parent was born in Canada (75%) compared to when neither parent was born here (45%). This overall upward trend could reflect greater interaction and integration with other groups the longer one spends in Canada.

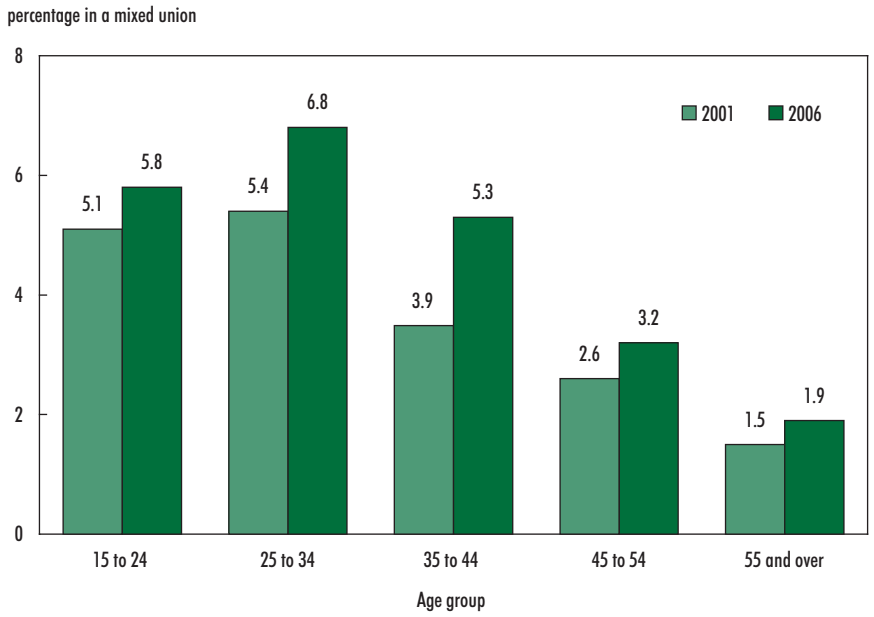
Persons in couples that are mixed unions are young and highly educated

Relationship formation is often associated with young adulthood and, in fact, among spouses and partners in 2006, the highest proportion of individuals in mixed unions occurred among 25- to 34-year-olds (6.8%), followed by individuals aged 15 to 24 years (5.8%). In the 55 and older category, only 1.9% of couples were in mixed unions. While the proportion of adults in mixed unions fell after age 34, all age groups showed an increase compared to 2001 (Chart 3).

When the distribution of married or partnered persons in mixed unions is compared with that of their counterparts in non-mixed unions, the largest percentage of mixed union spouses or partners was in the 35- to 44-year-old age group. Conversely, 35% of spouses or partners who were not in mixed unions were 55 years or older (Chart 4).

Being in a mixed union was also associated with other socio-economic characteristics like education. Only 1.8% of persons in couples with less than a high school education were in a mixed union, whereas this was the case for 4.8% of individuals with postsecondary education. In fact, among persons in couples who had a university degree, 6.4% were in mixed unions. Given that many visible minority group members are recent immigrants—who are generally more highly educated than the Canadian-born population—this could also be related to the tendency for persons in mixed unions to have higher levels of education. In addition, the university-educated population is, on

Chart 3 Young adults have highest proportion of mixed unions



Source: Statistics Canada, Census of Population, 2001 and 2006.

Chart 4 Persons in mixed unions are younger compared to those in non-mixed unions

Source: Statistics Canada, Census of Population, 2006.

average, younger than the population overall, which would contribute to the association between higher education and being in a mixed union (Table 4).

Consequently, more than one in three (35%) persons in couples that were mixed unions had a university degree in 2006 as did one in five (21%) persons in non-mixed couples. Other studies also found that out-group marriage is more likely for individuals with higher education levels (Chart 5).[9]

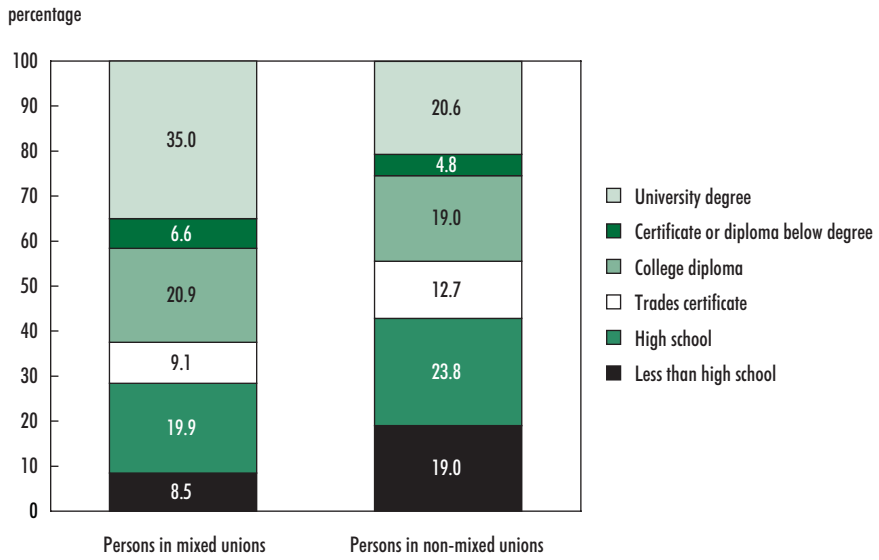
The labour force status of persons in mixed union couples is related to these higher education levels. A higher percentage of spouses or partners in mixed unions were employed (77%) compared to their counterparts in non-mixed couples (67%). Additionally, 19% of persons in mixed couples did not participate in the labour market compared with 30% of persons in non-mixed couples. Higher education and labour market participation rates were also linked to higher incomes for mixed union couples. Data from the 2006 Census show that the median census family income was nearly $5,000 higher for couples in mixed unions ($74,670) than for non-mixed couples ($69,830).[10] The lowest median income was for couples who belonged to the same visible minority group ($53,710) and the highest was for couples in which one spouse or partner belonged to a visible minority group and the other did not ($76,150). When neither member of the couple belonged to a visible minority group, the median census family income was $72,070 (Table 5).

Table 4 Persons in couples that were mixed unions by highest level of education, 2006

	Persons in a mixed union
	percentage
Highest level of education	
Total	**3.9**
Less than high school	1.8
High school graduate	3.2
Post-secondary education	4.8
Trades certificate	2.8
College diploma	4.2
Certificate or diploma below university degree	5.2
University degree	6.4

Source: Statistics Canada, Census of Population, 2006.

Chart 5 Persons in mixed unions have much higher levels of education than those in non-mixed unions



Source: Statistics Canada, Census of Population, 2006.

Mixed unions more predominant for common-law couples than for legally married couples

A higher proportion of couples living in a common-law arrangement than legally married couples were in mixed unions. About 4.9% of common-law couples were in mixed unions while this was true for 3.6% of couples in legal marriages. Recent research from the United States on Blacks in mixed unions also found that such relationships were more likely to be common-law unions than marriages.[11] In Canada, mixed couples comprised of one Black person had the highest proportion of unions that were common-law (32%). In contrast, mixed couples comprised of either Japanese or South Asian persons were least likely to be common-law. Nearly one-quarter of all mixed unions in 2006 were common-law relationships compared to less than one-fifth of non-mixed couples.

The 2006 Census marked the first time data were collected on both same-sex married and common-law couples.[12] Although same-sex couples account for only a small

Table 5 Census family median income by mixed union status, 2006

	Median income
	dollars
Total couples	**70,000**
Mixed unions	74,670
Spouses or partners belong to different visible minority groups	66,080
One spouse or partner belongs to a visible minority group and the other does not	76,150
Non-mixed unions	69,830
Both spouses or partners belong to the same visible minority group	53,710
Neither spouse or partner belongs to a visible minority group	72,070

Source: Statistics Canada, Census of Population, 2006.

number of overall couples,[13] a higher proportion of same-sex couples were in mixed unions in 2006 compared to opposite-sex couples. Almost one in ten (9.8%) same-sex couples were in mixed unions compared to less than one in twenty (3.8%) opposite-sex couples. There currently may be a higher proportion of same-sex than opposite-sex mixed couples for two reasons: same-sex couples overall were more likely to be common-law than opposite-sex couples, and couples living common-law had a greater tendency to be in mixed unions compared to married couples. In fact, 10% of same-sex common-law relationships in 2006 were mixed couples, while this was the case for 8.4% of same-sex married couples. The corresponding figures for opposite-sex couples were 4.7% and 3.6%, respectively. Given the recent legalization of same-sex marriage, this pattern could possibly change in the future once more same-sex couples have the opportunity to marry.[14]

Most couples in mixed unions in largest CMAs

The proportion of couples in mixed unions in 2006 was higher in three provinces than in the country as a whole. In British Columbia, 5.9% of couples were mixed unions, while the corresponding figure was 4.6% in Ontario followed by 4.2% in Alberta. This is largely the result of the high number of couples in mixed unions living in the CMAs of these provinces. Of the 11 CMAs with proportions of couples in mixed unions that were higher than the national average, all but two (Montréal and Winnipeg) were located in these three provinces.[15]

As a proportion of all couples, mixed unions can be viewed as an urban phenomenon, particularly in certain CMAs. Overall, 5.1% of couples who lived in CMAs in 2006 were in mixed unions. In contrast, among couples who lived outside a CMA, 1.4% were in a mixed union. However, when the percentage of mixed unions as a proportion of the visible minority population is examined, a different pattern emerges (see An alternative look at mixed unions and urban areas). The CMAs with the highest proportions of couples in mixed unions in 2006 were Vancouver (8.5%) and Toronto (7.1%). Calgary had the third highest proportion of couples in mixed unions (6.1%) (Table 6). While Vancouver and Toronto have long had large visible minority populations, Calgary had the fourth highest proportion of visible minorities aged 15 and older in 2006 (21%) after Toronto (41%), Vancouver (40%) and Abbotsford (21%).[16] CMAs with the lowest proportions of mixed couples, like Saguenay (0.6%) and St. John's (0.9%), were also characterized by both low levels of immigration and a small visible minority population (Table 6).

Within CMAs, a higher proportion of couples in mixed unions were found in the central municipality than in the peripheral municipalities.[17] While 3.9% of all couples were in mixed unions in 2006, 5.5% of couples in the central municipality of CMAs were mixed compared to 4.7% in the surrounding municipalities. It could be that living in the central municipality offers amenities that are attractive to individuals who possess some of the other characteristics that are associated with being in a mixed union. For example, 2006 Census data showed a higher proportion of persons aged 20 to 34 and a higher proportion of same-sex couples were living in central municipalities.[18]

Language of persons in mixed couples

Mixed unions are important to study not only because they represent another aspect of diversity in and of themselves, but also because of the implications for their participants in other areas. One example of the impact of mixed unions is that there may be some degree of linguistic transfer for persons in these types of couples. According to the 2006 Census, a higher proportion of allophones[19] in mixed unions with a non-official mother tongue reported using an official language at home compared to those in non-mixed unions. Close to 8 in 10 allophones in mixed unions spoke English or French most often in the home in 2006, while this was the case for less than 4 in 10 allophones in non-mixed unions. In contrast, only 17% of allophones in mixed unions used a non-official language at home as did 57% of their counterparts in non-mixed unions (Chart 6).

Children in mixed union families

Although census data cannot determine if the children in the family were from the current relationship,

Table 6 Percentage of couples in mixed unions by census metropolitan area, 2006

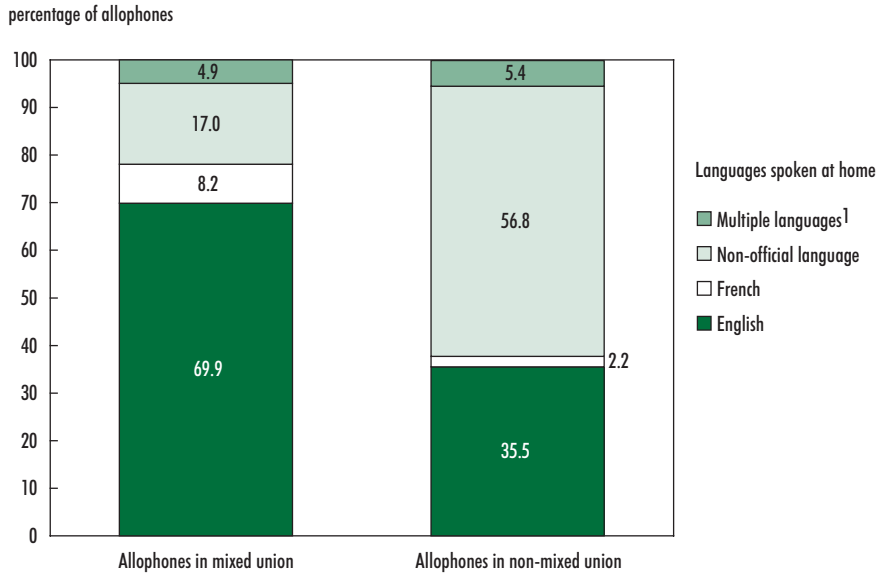
Census metropolitan area	Couples in mixed unions percentage	Census metropolitan area	Couples in mixed unions percentage
Vancouver	8.5	Halifax	3.3
Toronto	7.1	Kelowna	3.2
Calgary	6.1	Regina	2.6
Victoria	5.9	Saskatoon	2.6
Oshawa	5.4	St. Catharines-Niagara	2.6
Ottawa-Gatineau	5.4	Kingston	2.5
Edmonton	4.6	Brantford	2.2
Montréal	4.4	Thunder Bay	2.1
Winnipeg	4.2	Saint John	1.8
Guelph	4.2	Sherbrooke	1.7
Abbotsford	4.0	Québec	1.5
Canada	**3.9**	Peterborough	1.4
Hamilton	3.9	Greater Sudbury	1.3
Kitchener	3.9	Trois-Rivières	1.3
Barrie	3.8	Moncton	1.3
Windsor	3.7	St. John's	0.9
London	3.4	Saguenay	0.6

Source: Statistics Canada, Census of Population, 2006.

mixed couples had a higher proportion of having children at home, largely because individuals in mixed couples were generally younger than other couples. In 2006, 58% of the 289,400 mixed union couples had at least one child present in the home compared with 54% of all non-mixed unions. Furthermore, about 1 in 10 mixed union couples had at least one child under age 2 and none older than 5 years of age in the home compared to 5.6% of non-mixed couples.

A total of 293,600 children in 2006 lived in two-parent census families that had parents in mixed union relationships.[20] Among these children, two-thirds (66%) reported visible minority status while one-third did not belong to a visible minority group. Of the children who reported a visible minority status, the most common mixed union family (137,700 children) was when the child and one parent belonged to the same visible minority group and the other parent was not a visible minority.

Chart 6 Allophones in mixed unions reported using an official language at home more than allophones in non-mixed unions



1. Multiple languages refers to individuals who reported English and/or French and non-official language(s).
Source: Statistics Canada, Census of Population, 2006.

Table 7 Children in two-parent families by visible minority status, 2006

	Children in two-parent families	
	number	percentage
Visible minority status		
Total children	**6,971,750**	**100.0**
Child does not belong to visible minority group	**5,567,900**	**79.9**
Child and parents do not belong to visible minority group	5,459,400	78.3
Child and one parent do not belong to visible minority group, one parent in visible minority group	97,300	1.4
Child does not belong to visible minority group, parents in visible minority group	11,200	0.2
Child belongs to visible minority group	**1,403,900**	**20.1**
Child and parents in same visible minority group	1,171,500	16.8
Child in visible minority group different from at least one parent	232,400	3.3
Child and one parent in same visible minority group, one parent non-visible minority	137,700	2.0
Child and one parent in same visible minority group, one parent different visible minority	29,200	0.4
Child belongs to visible minority group, both parents non-visible minority	27,700	0.4
Child and parents each in different visible minority groups	18,100	0.3
Parents in same visible minority group, child in different visible minority	9,800	0.1
Child and one parent different visible minority, other parent non-visible minority	9,800	0.1

Note: These figures refer to children aged 0 to 24 present in the home of two-parent census families by visible minority status of children and visible minority status of parents.
Source: Statistics Canada, Census of Population, 2006.

An alternative look at mixed unions and urban areas

The proportion of spouses or partners in mixed unions is highest in the largest CMAs when the total population in couples is used as the denominator. However, if the denominator is based on the visible minority population in couples, then the results indicate that some CMAs with relatively small visible minority populations actually have fairly large proportions of individuals who are married or partnered outside their group. For example, the Quebec CMAs of Saguenay, Trois-Rivières and Québec, as well as Moncton and Saint John in New Brunswick, and Thunder Bay and Barrie in Ontario, all have relatively small visible minority populations. Due to the small size of these groups, this accounts for the high proportion (40% or greater) of the married or partnered visible minority population who formed unions outside their groups. When viewed from this perspective, the three CMAs with the lowest proportions of persons belonging to visible minority groups who were in couples that were mixed Vancouver (12.2%), Toronto (10.9%) and Abbotsford (9.8%).

There were also about 18,100 children in mixed union families where the child as well as each parent reported a different visible minority group, and an additional 9,800 children who belonged to a different visible group than one parent while the other parent did not have visible minority status (Table 7). Many of these children, 97% and 48%, respectively, reported a less common visible minority group or they simply reported as members of multiple visible minority groups.[21]

Mixed unions may create a culturally diverse environment within the family. Cultural practices within the family can impact the children.[22] As the proportion of mixed unions increases in Canada, the implications may extend beyond the couples to the children's sense of identity.

Summary

According to census data, the number of couples in mixed unions has been on the rise in Canada since at least the early 1990s, at least partially due to the growth in the visible minority population. Based on the 2006 Census, Japanese were most likely to form a relationship outside their group, while this was least likely for South Asians. Within-group differences were also apparent as a higher proportion of Filipino, Korean, Southeast Asian, Japanese, Chinese and Latin American women in couples were in mixed unions compared to men from these groups, while married or partnered men who were Arab or West Asian, Black or South Asian represented a higher share of mixed unions than their female counterparts.

Compared to persons in couples who were not in mixed unions, persons in mixed unions were younger, did better socio-economically and were more likely to live in large CMAs. For the visible minority population, there were more spouses or partners in mixed unions who were Canadian-born compared to those who were foreign-born, and the proportion increased with generation status.

There were proportionally more couples in common-law relationships in mixed unions than couples who were legally married, and a higher proportion of same-sex couples were in mixed unions than couples who were in opposite-sex couples.

More couples with at least one child present in the home were mixed compared to couples who did not have children, reflecting the fact that mixed union couples were generally younger and more likely to be at their life-cycle stage of having young children. In addition to the number of children whose parents were in mixed unions, the concept of mixed families, like those comprised of a child belonging to a visible minority but not the parents, further broadens the implications of ethno-cultural identity.

The impact of mixed unions could be far-reaching in changing the dynamic and nature of Canada's ethnocultural diversity in future generations. These consequences may impact the language transfer that takes place within mixed union households, as well as the experiences of children in mixed families and the way in which children of mixed unions report their ethnocultural origins and identify with visible minority groups.

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1. See also Milan, A. and Hamm, B. (2004). Mixed unions. *Canadian Social Trends*. Statistics Canada Catalogue no. 11-008-XWE.
2. For more information, see Chui, T., Tran, K. and Maheux, H. (2008). *Canada's Ethnocultural Mosaic, 2006 Census*. Statistics Canada Catalogue no. 97-562-X.
3. Milan and Hamm. (2004).
4. These figures include all ages.
5. Batson, C. D., Qian, Z. and Lichter, D. T. (2006). Interracial and intraracial patterns of mate selection among America's diverse Black populations. *Journal of Marriage and Family*. 68: 658–672.
6. **First generation:** Persons born outside Canada. For the most part, these are people who are now, or have ever been, landed immigrants in Canada. Also included in the first generation are a small number of people born outside Canada to parents who are Canadian citizens by birth. In addition, the first generation includes people who are non-permanent residents. **Second generation:** Persons born inside Canada with at least one parent born outside Canada. This includes: (a) persons born in Canada with both parents born outside Canada and (b) persons born in Canada with one parent born in Canada and one parent born outside Canada (these persons may also have grandparents born inside or outside Canada). **Third generation or more:** Persons born inside Canada with both parents born inside Canada (these persons may also have grandparents born inside or outside Canada). Definition from Chui, T., Tran, K. and Maheux, H. (2008). Canada's Ethnocultural Mosaic, 2006 Census. Statistics Canada Catalogue no. 97-562-X.
7. Lee, S. M. and Boyd, M. (2008). Marrying out: Comparing the marital and social integration of Asians in the U.S. and Canada. *Social Science Research*. 37: 311-329.
8. Kalmijn, M. and van Tubergen, F. (2006). Ethnic intermarriage in the Netherlands: Confirmations and refutations of accepted insights. European Journal of Population. 22: 371-397.
9. Kalmijn, M. and van Tubergen, F. (2006). Ethnic intermarriage in the Netherlands: Confirmations and refutations of accepted insights. *European Journal of Population*. 22: 371-397. Aaron Gullickson. (2006). Education and Black–White interracial marriage. *Demography*. 43, 4: 673-689.
10. Income data from the census relate to the calendar year prior to the census year. For the 2006 Census, the income data refer to 2005.
11. Batson, Qian and Lichter. (2006).
12. The first time information was collected on same-sex common-law couples was in the 2001 Census.
13. Of the 7.5 million married and common-law couples in 2006, 45,300 were same-sex couples.
14. Bill C-38, the *Civil Marriage Act*, adopted on July 20, 2005, legalized same-sex marriage. Some provinces and territories had already legalized same-sex marriage, beginning with Ontario in June 2003.
15. Although the Ottawa-Gatineau CMA spans both the provinces of Quebec and Ontario, approximately three-quarters of the population is located on the Ontario side.
16. Labour Force Activity (8), Visible Minority Groups (14), Immigrant Status and Period of Immigration (9A), Age Groups (9) and Sex (3) for the Population 15 Years and Over of Canada, Provinces, Territories, Census Metropolitan Areas and Census Agglomerations, 1996 to 2006 Censuses – 20% Sample Data. Statistics Canada Catalogue no. 97-562-X2006013.
17. It is important to distinguish between census metropolitan areas and municipalities (census subdivisions). A CMA usually consists of many municipalities, one of which, called the central municipality, is the census subdivision for which the CMA is named.
18. Martel, L. and Caron Malenfant, É. (2007). *Portrait of the Canadian Population in 2006, by Age and Sex, 2006 Census*. Statistics Canada Catalogue no. 97-551-X. Milan, A., Vézina, M. and Wells, C. (2007). *Family Portrait: Continuity and Change in Canadian Families and Households in 2006, 2006 Census*. Statistics Canada Catalogue no. 97-553-X.
19. An allophone is a person whose mother tongue is other than English or French.
20. Of the 7 million children under age 25 living with two parents, roughly 340,800 children, or 4.9%, lived in a mixed family situation where at least one family member, either the parent(s) or child, belonged to a visible minority group and at least one family member did not, or at least one family member belonged to a visible minority group that was different from the other family members.
21. Less common visible minority groups are reported in the category called visible minority n.i.e. (also known as 'not included elsewhere'). This category includes respondents who reported a write-in response such as Guyanese, West Indian, Kurd, Tibetan, Polynesian and Pacific Islander. Belonging to multiple visible minority groups means that respondents reported more than one visible minority group by checking two or more mark-in circles, e.g., Black and South Asian.
22. For example, see Turcotte, M. (2006). Passing on the ancestral language. *Canadian Social Trends*. Statistics Canada Catalogue no. 11-008-XWE.

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