CANADIAN SOCIAL TRENDS

CATALOGUE NO. 11-008

FEATURES

Safety of our neighbourhoods

Underweight Canadians

Vulnerable families

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Still overqualified for my job

WINTER 2002 NO. 67
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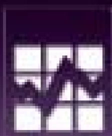

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Is your community child-friendly?

by Alice Peters

Much research has focussed on the socio-economic impact that a child's neighbourhood has on their future.[1,2,3] Studies have also shown that parents' perceptions of crime and other social problems in their neighbourhood affect their sense of belonging and the approach they take to raising their children.[4] How do Canadian parents, especially mothers, feel about their own neighbourhoods? Do they feel they are safe places to raise their children? Do they believe they have good neighbours who will watch out for their children and help them when they are in need? This study uses data from the 1999 National Longitudinal Survey of Children and Youth to

1. Sampson, R.J., S.W. Raudenbush and F. Earls. 1997. "Neighbourhoods and violent crime: A multilevel study of collective efficacy." *Science* 277: 918-924.
2. Connor, S. and S. Brink. 1999. "Understanding the early years." *Community Impacts on Child Development.* Human Resources Development Canada.
3. Sampson, R.J., S.W. Raudenbush and F. Earls. 1998. "Neighbourhood cohesion — does it help reduce violence?" *National Institute of Justice Research Preview*. National Institute of Justice: Washington, D.C.
4. Such as the work done by Harvard University's Center for Childhood Development and the Project on Human Development in Chicago Neighbourhoods.

CST What you should know about this study

This article is based on data from the 1999 National Longitudinal Survey of Children and Youth (NLSCY). The NLSCY is conducted by Statistics Canada in partnership with Human Resources Development Canada. It is designed to develop a better understanding of the factors that contribute to a child's development over time. In 1999, over 30,000 children were sampled for the third cycle of the NLSCY. Demographic questions about the household were asked to determine the "person most knowledgeable" (PMK) about the child (usually the mother. In fact, 94% of the PMKs were female). Questions about neighbourhood safety, which cover length of residency in the neighbourhood, satisfaction with the neighbourhood as a place to bring up children, safety, social cohesion and neighbourhood problems, were completed by the PMK. For reasons of simplicity, the PMK is usually referred to as "parent" in this article.

For more information, see Statistics Canada, *National Longitudinal Survey of Children and Youth: Overview of Survey Instruments for 1999* (Report no. 89F0078XIE1999003).

examine how parents (usually the mother) feel about various aspects of their neighbourhood, especially how they feel about bringing up children there, as well as their assessment of problems in their neighbourhoods and their sense of "community spirit."

Most believe they live in good neighbourhoods

With increased numbers of lone-parent families and two-parent families where both parents work outside the home, neighbourhoods are very different than in previous generations. We live in an increasingly busy world, where many people leave their homes early in the morning to go to their jobs and return to take on another set of responsibilities at home. In this environment, leisurely chats over the fence with neighbours are probably much less frequent than they were a generation ago. Yet, in general, respondents view their neighbourhoods in a very positive light. Most parents believe their neighbourhood is excellent (51%) or good (33%) as a place to bring up children. They also have strong perceptions that people are willing to help their neighbours (88% strongly agree or agree), and that they can count on adults in their neighbourhood to watch out that children are safe and don't get in trouble (86% strongly agree or agree). Parents had especially positive perceptions that there were adults in the neighbourhood that children can look up to: 20% of respondents strongly agreed, and 63% agreed, with only 8% disagreeing.

Similar results are found when parents were asked if their neighbours would keep their eyes open for possible trouble when they were away (88% strongly agree or agree). People were a little less likely, however, to perceive their neighbourhood as one in which the neighbours get together to deal with problems: 15% of respondents strongly agreed and 53% agreed, but 22% disagreed or strongly disagreed.

These findings are consistent with previous research. A 1999 study found that a majority of Canadians (60%) were firm in their belief that crime in their neighbourhood was lower than crime in other Canadian communities, and a further 28% believed that crime was about the same as in other neighbourhoods.[5]

Higher incomes mean more neighbourhood satisfaction

Because the type and location of housing people choose depend on what they can afford, income has a large impact on a family's perceptions of safety and how fearful they are of being victims of crime. Studies from the "Moving to Opportunity" experiment in the U.S., which helped families from housing projects move to much more affluent neighbourhoods, found that parents and children who moved to better neighbourhoods experienced large improvements in measures of well-being, such as overall resident satisfaction, lower crime incidence and improved health.[6,7]

It is not surprising, then, that parents with higher incomes feel more positively about their neighbourhoods. In 1999, 63% of those who had incomes above $80,000 felt that their neighbourhood was an excellent place to bring up children compared with 35% of those with incomes below $15,000. Those with incomes above $80,000 were also much more inclined to strongly agree or agree that neighbours are willing to help

5. Statistics Canada. 2000. *A Profile of Criminal Victimization: Results of the 1999 General Social Survey* (Statistics Canada Catalogue no. 85-553-XIE).
6. Katz, L.F., J.R. Kling and J.B. Liebman. 2001. "Moving to Opportunity in Boston: Early Results of a Randomized Mobility Experiment." *Quarterly Journal of Economics* 116, 6: 607-654.
7. Ludwig, J., G. Duncan and P. Hirshfeld. 2001. "Urban Poverty and Juvenile Crime: Evidence from a Randomized Housing Mobility Experiment." *Quarterly Journal of Economics* 116, 6: 655-680.

CST Do Canadians worry about their personal safety?

The 1999 General Social Survey examined Canadians' perceptions of crime and personal safety. The survey asked respondents how safe they felt when walking alone in their neighbourhood after dark; waiting for or using public transportation alone after dark; and being home alone at night. In 1999, 54% of those who used public transportation alone at night indicated that they were not at all worried when waiting for or using it; 43% felt very safe walking alone in their neighbourhood at night; and 80% of Canadians indicated that they were not at all worried when home alone at night.

Feelings of safety from crime for population aged 15 and over, 1999

	Population 15 and over (000s)	% of population 15 and over
Total	**24,260**	**100**
While waiting for/using public transportation alone after dark, how do you feel about your safety from crime?[1]		
Not at all worried	3,306	54
Somewhat worried	2,390	39
Very worried	438	7
Don't know/not stated	42	1
Total	**6,176**	**100**
How safe do you feel from crime when walking alone in your area after dark?[1]		
Very safe	7,964	43
Reasonably safe	8,322	45
Somewhat unsafe	1,627	9
Very unsafe	412	2
Don't know/not stated	63	--
Total	**18,388**	**100**
While alone in your home in the evening or at night, how do you feel about your safety from crime?[2]		
Not at all worried	19,104	80
Somewhat worried	4,374	18
Very worried	496	2
Don't know/not stated	44	--
Total	**24,018**	**100**

-- Amount too small to be expressed.

Figures may not add to total due to rounding.

1. Based on responses for people who engage in these activities.

2. Excludes the estimated 1% of the population that is never home alone.

Source: Statistics Canada. 2000. *A Profile of Criminal Victimization: Results of the 1999 General Social Survey* (Statistics Canada Catalogue no. 85-553-XIE).

each other (93%), compared with those with incomes below $15,000 (66%), and that there are adults in the neighbourhood for children to look up to, at 89% for the higher income parents versus 64% for the lower income parents.

Older respondents were also more likely to rank their neighbourhoods highly. This result is to be expected, since older people have had more time in which to accumulate financial resources and therefore have more options in housing choices. Of those aged 40 and over, 55% felt that their neighbourhood was excellent as a place to bring up children, while 43% of those aged 25 to 29 felt the same. Those aged 40 and over were also much more likely to strongly agree or agree that neighbours deal with problems together, at 70%, compared with 58% of those aged 25 to 29.

Also, ties to our neighbourhoods seem to strengthen with the passage of time. The longer people had been residents, the more likely they were to feel positively about their neighbourhoods. Only 42% of those who had lived in their neighbourhood for less than a year thought it was an excellent place to bring up children, compared with 60% of those who had lived in their neighbourhood 10 years.

Housing type affects neighbourhood satisfaction

Many researchers believe that housing design has an impact on how we interact with our neighbours. Modern planning techniques, for example, have helped create suburbs filled with lower-density, single-family houses and city cores with high-density multi-storied apartment buildings. Previous studies of the frequency of people's contact with other residents of their neighbourhood have identified the importance of the type of housing a person occupies, length of residence at that address, and the proximity of

family members in the neighbourhood as factors that affect how neighbours interact.[8]

So it is not surprising that parents living in single family, semi-detached or garden homes were more likely to rate their neighbourhood excellent as a place to bring up children, at 55%, compared with 28% of those who lived in duplexes or apartments. Residents of single family, semi-detached or garden homes were also much more likely to believe that their neighbours deal with problems together, are willing to help each other, and would watch out for trouble in their absence. They also felt more certain that their neighbours kept an eye out for children's safety and that there were adults in the neighbourhood children could look up to.

Families in single family, semi-detached and garden homes feel more positively about their neighbourhoods…

	Strongly agree or agree	
	Single family, semi-detached or garden homes	Duplexes or apartments
	%	
Neighbours deal with problems together	70	53
There are adults for kids to look up to	86	68
Neighbours are willing to help each other	91	75
Neighbours watch out that children are safe	89	72
Neighbours watch out for trouble in their absence	91	73

… as do those who volunteer

	Involved in volunteer work	Not involved in volunteer work
	%	
Neighbours deal with problems together	76	64
There are adults for kids to look up to	91	81
Neighbours are willing to help each other	94	87
Neighbours watch out that children are safe	91	86
Neighbours watch out for trouble in their absence	94	87

Source: Statistics Canada, National Longitudinal Survey of Children and Youth, 1999.

Community involvement increased neighbourbood satisfaction

Parents who did volunteer work were more likely to rank their neighbourhoods highly than those who did not: 58% of those who volunteered ranked their neighbourhood as an excellent place to bring up children, versus 48% of non-volunteers. Those who volunteered were also more likely to strongly agree or agree that neighbours deal with problems together and are willing to help each other, that there are adults in the neighbourhood for children to look up to, that neighbours watch out that children are safe, and that neighbours watch out for trouble when other people are not at home.

Summary

How a person feels about their neighbourhood is subjective and difficult to measure. Everyone has a different reaction that varies according to their age, level of education and income status. Income largely determines the type and location of housing that a person chooses. Those with higher incomes, therefore, tend to live in better houses and better locations, and are more satisfied with their neighbourhoods. Respondents living in single family, semi-detached or garden homes were much more likely to perceive their neighbourhood as an excellent place to bring up children than were those who live in duplexes or apartments.

In general, however, respondents had very positive perceptions about their neighbourhood as a place to bring up children. Most believed that their neighbours were willing to help each other and watch out that children were safe. Respondents aged 40 and older ranked their neighbourhoods highest. As well, the longer people had lived in their neighbourhoods, the more likely they were to feel positively about them. Parents with higher levels of education and those who were involved in volunteer work were also more likely to rank their neighbourhoods highly.

Alice Peters is an analyst with *Canadian Social Trends.*

8. Kremarik, F. Summer 2000. "The other side of the fence." *Canadian Social Trends*. p. 20-24.

Underweight Canadians

by Janet Che

As a society, we are obsessed with the "perfect" body. While for men this implies mostly strength and muscle, for women, the often-perceived "ideal" calls for, among other things, an impossibly lean physique. Although most people recognize that skinny does not necessarily equal healthy, the urge to conform to society's ideals tends to be strong. And we live in a culture that prizes thinness — for women at least.

Culture, however, is only one factor that influences body weight. Others include genetic, socioeconomic, and

CST What you should know about this study

Data in this article come from the National Population Health Survey (NPHS), which collects information about the health of Canadians every two years. It covers residents in all provinces and territories, except persons living on Indian reserves, on Canadian Forces bases, and in some remote areas.

Underweight: Refers to the segment of the population with a body mass index (BMI) of less than 20.

Household income: Household income groups were based on household size and total household income from all sources in the 12 months before the interview.

Distress: The distress index was based on six questions. Respondents were asked: "During the past month, how often did you feel: so sad that nothing could cheer you up? nervous? restless or fidgety? hopeless? worthless? that everything was an effort?" The response options — all of the time, most of the time, some of the time, a little of the time, and none of the time — were given weights of 4, 3, 2, 1 and 0, respectively. The score could range from 0 to 24. Respondents scoring 7 or more were classified as feeling distressed; about 15% of underweight respondents and 12% of those with acceptable weight fell into this category.

Smoking status: Individuals were asked if they smoked cigarettes daily, occasionally, or not at all. This article used two categories: current smoker (daily or occasional) and non- smoker (former smokers or those who never smoked).

Leisure-time physical activity

Active: Those who averaged 3.0 or more kcal/kg/day of energy expenditure. This is approximately the amount of exercise that is required for cardiovascular health benefit (for example, jogging for an hour three times a week).

Moderately active: Those who averaged between 1.5 and 2.9 kcal/kg/day. They might experience some health benefits but little cardiovascular benefit (for example, walking for an hour four times a week).

Inactive: Those whose daily energy expenditures were below 1.5 kcal/kg (for example, gardening for an hour twice a week).

behavioral reasons as well as health status and the presence of chronic disease. Whatever the factors, though, warnings about and awareness of the health consequences of excess weight abound,[1] while much less attention seems to be paid to the implications of being underweight. In part, this may be because it is not as prevalent as being overweight. But also, because thinness is so commonly regarded as an ultimate goal, it is hard to think of it as a health concern.

Research on the health and well-being of underweight Canadians is limited, and experts' opinions on the topic vary. Some researchers state that the health risks of being moderately underweight are comparable to that of being quite overweight.[2] Others claim that being very thin could be associated with chronic conditions and shortened life span.[3] On the other hand, some maintain that low

1. Heart disease, high blood pressure, type II diabetes, gall bladder disease, and some types of cancer are often associated with excess weight. Pi-Sunyer, F.X. 1993. "Medical hazards of obesity." *Annals of Internal Medicine* 119, 7: 655-660; Berg, F.M. July/August 1995. "Obesity costs reach $45.8 billion." *Healthy Weight Journal* 6; Rabkin, S.W., Y. Chen, L. Leiter, L. Liu and B.A. Reeder. Canadian Heart Health Surveys Research Group. 1997. "Risk factor correlates of body mass index." *Canadian Medical Association Journal* 157 (1 suppl.): S26-S31; Must, A., J. Spadano, E.H. Coakley, A.E. Field, G. Colditz and W.H. Dietz. 1999. "The disease burden associated with overweight and obesity." *The Journal of the American Medical Association* 282, 16: 1523-1529.
2. Troiano, R.P., E.A. Frongillo Jr., J. Sobal and D.A. Levitsky. 1996. "The relationship between body weight and mortality: A quantitative analysis of combined information from existing studies." *International Journal of Obesity* 20: 63-75.
3. American Dietetic Association. *Healthy Weight, Healthy You*. www.eatright.org/nfs/nfs12.html (accessed November 21, 2001).

CST Body mass index

Body mass index (BMI) is calculated as weight in kilograms divided by the square of height in meters. To convert pounds to kilograms, divide by 2.2, and to arrive at height in meters, divide inches by 39.4.

For example, to calculate the BMI of someone who weighs 130 pounds and is 65 inches (5'5") tall, you have to do the following:

1. 130 pounds/2.2 = 59 kilograms
2. 65 inches/39.4 = 1.65 meters
3. 1.65 x 1.65 = 2.72
4. 59 kilograms/2.72 = 21.7 BMI

Therefore, a person with these measurements has a body mass index of 22, which is in the acceptable range.

Canadian Guidelines for Healthy Weights uses BMI as a measuring unit of weight for adult Canadians. The World Health Organization (WHO) and the National Institute of Health (NIH) in the United States also use BMI in their weight guidelines, although the cutoffs are different than those used in Canada.

BMI guidelines

Canadian	**International (WHO and NIH)**
Underweight: under 20	Underweight: 18.5 or under
Acceptable weight: 20 to under 25	Acceptable weight: 18.5 to under 25
Some excess weight: 25 to 27	Overweight: 25 to under 30
Overweight: over 27	Obese: 30 or over

In general, BMI is not calculated for pregnant women. While some reports have restricted the calculation of BMI to people aged 20 to 64, this article, like some others, includes individuals aged 15 and over.[1]

Limitations of BMI: BMI has been widely used to study the relationship between weight and health. Overall, it works well as a simple surrogate measure of body fat in most middle-aged adults. However, it is not perfect. As BMI does not discriminate between muscle and fat, some people with a high BMI may be very muscular with little body fat. Others, whose BMI is in the acceptable range, may have little muscle mass and too much body fat. BMI is probably a less valid measure for bodybuilders, athletes, adolescents who are still growing, and older adults.

1. McElhone, S., J.M. Kearney, G. Chetti et al. Winter 1999. "Body image perception in relation to recent weight changes and strategies for weight loss in a nationally representative sample in the European Union." *Public Health Nutrition* 2 (1a): 143-151; Statistics Canada. Winter 1999. "Personal health practices: Smoking, drinking, physical activity and weight." *Health Reports: How Healthy Are Canadians?* 11, 3 (Statistics Canada Catalogue no. 82-003): 83-90; Statistics Canada. Winter 2000. "Taking risks/taking care." *Health Reports: How Healthy Are Canadians?* 12, 3 (Statistics Canada Catalogue no. 82-003): 11-20.

body weight is linked with low mortality rates and there is little evidence of harm in being very thin.[4]

Using data from the 1998–99 National Population Health Survey (NPHS), this article explores the demographic, social and economic characteristics of the underweight population. It also compares selected health characteristics of underweight Canadians with those of individuals whose weight is considered acceptable.

Women, teens, and unmarried people are more likely to be underweight

	Population aged 15 and over[1]	Underweight population
	'000	%
Total	**23,600**	**9**
Sex		
Males	11,700	5
Females	11,900	13
Age		
15–19	2,100	28
20–24	1,900	14
25–44	9,400	8
45–64	6,700	5
65 and over	3,500	8
Marital status		
Single, never-married	6,300	17
Married, common-law	14,000	6
Widowed	1,400	9
Separated/divorced	1,900	7
Living arrangements		
Living alone	3,500	8
Living with immediate family	17,400	9
Living with others	2,700	12
Household income		
Low	3,000	12
Middle	5,800	9
High	13,100	8
Missing	1,800	14

1. Excludes pregnant women.

Source: Statistics Canada, National Population Health Survey, 1998–99.

Nearly one in 10 Canadians report being underweight

According to the 1998–99 NPHS, almost one in 10 (9%) Canadians aged 15 and over, 2.2 million people, were underweight (i.e. they have a body mass index, or BMI, of less than 20). While the proportion of overweight individuals has increased steadily over time (from 17% in 1985 to 30% in 1998–99)[5], that of underweight Canadians has dropped from 13% to 9% during these years.

Because there is a natural tendency to gain weight with age, young people are the most likely group to be underweight. Indeed, in 1998–99, about 28% of 15- to 19-year-olds[6] and 14% of 20- to 24-year-olds were underweight, compared with 8% of those aged 65 and over. The likelihood of being underweight is lowest, at about 5%, between the ages of 45 and 64.

Besides age, other factors may also be associated with being underweight, such as sex, marital status, living arrangements and household income. But when these factors were held constant, the odds of being underweight still remained higher for the 15- to 19-year-old and the 20- to 24-year-old groups than for those aged 65 and over.

Low body weight at younger ages could be the result of numerous factors, including a more active lifestyle, a higher metabolic rate, or weight concerns during adolescence. In the pursuit of thinness, young people are more likely to engage in weight control measures such as dieting, smoking or excessive exercising.

Women substantially more likely to be underweight

According to the 1998–99 NPHS, women were far more likely than men to be underweight (13% versus 5%, respectively). While men's larger muscle and bone mass may account for some of the disparity, women are also

4. Manson, J.E., W.C. Willett, M.J. Stampfer, G.A. Colditz, D.J. Hunter, S.E. Hankinson, C.H. Hennekens and F.E. Speizer. 1995. "Body weight and mortality among women." *The New England Journal of Medicine* 333, 11: 677-685; Byers, T. 1995. "Body weight and mortality." *The New England Journal of Medicine* 333, 11: 723-724.
5. The data from 1985 are from the General Social Survey, while data from 1998–99 are from the National Population Health Survey.
6. As teenagers' bodies have not yet finished growing, BMI measures for them should be interpreted with caution.

CST In all age groups, women are much more likely to be underweight than men

1. Population excludes pregnant women.
2. Subject to high sampling variability.
Source: Statistics Canada, National Population Health Survey, 1998–99.

generally more likely to try to lose weight.[7] These gender differences persisted even after the effects of the other socio-demographic factors were taken into consideration: the odds of women being underweight were nearly three times that of men.

The difference in the proportion of underweight men and women occur in all age groups, although to different degrees. At 18 percentage points, the gap peaks among 20- to 24-year-olds (24% of females versus 6% of males are underweight in this age group) then starts declining. By the time individuals are 45 or over, the difference in the percentage of underweight men and women diminishes greatly.

The fact that young women are considerably more likely to be underweight than young men is not surprising. It is a well-documented fact that teenage boys and girls have different ideals regarding body shape and weight. For example, a study of college students showed that, while the majority wished to change their weights, males wanted to gain but females wanted to lose weight.[8] Some researchers maintain that the gender difference in body shape and weight aspiration may start as early as age nine.[9]

Underweight people more likely to be found among singles

Both being single and living with people other than immediate family are associated with being underweight.[10] Singles were more than twice as likely to be underweight as their married or common-law counterparts: 17% versus 6%, respectively. Similarly, individuals who lived with immediate family were less likely to be underweight (9%) than those who lived with others (12%). People who do not have the support of family members and who probably eat alone more, may simply not bother to spend time cooking nutritious meals for themselves. After holding all other factors constant, singles still had a significantly higher likelihood of being underweight than married people, but the effect of living arrangements was no longer significant.

Income also appears to have a bearing on being underweight. Nearly 12% of Canadians who lived in low-income households were underweight compared with 8% of their high-income counterparts.[11] Lower levels of income can lead to poor nutrition if there is insufficient money to buy the right quantity and quality of food. And poor nutrition is a known cause of being underweight. However, when the effects of sex, age, marital status and living arrangements were taken into account, the association between income and being underweight was no longer statistically significant. In other words, different levels of income did not influence the odds of being underweight.

7. Green, K.L., R. Cameron, J. Polivy, K. Cooper, L. Liu, L. Leiter and T. Heatherton. Canadian Heart Health Surveys Research Group. 1997. "Weight dissatisfaction and weight loss attempts among Canadian adults." *Canadian Medical Association Journal* 157 (1 suppl.): S17-S25.
8. Conner-Greene, P.A. 1988. "Gender differences in body weight perception and weight-loss strategies of college students." *Women and Health* 14, 2: 27-42.
9. Hill, A.J., E. Draper and J. Stack. 1994. "A weight on children's minds: Body shape dissatisfactions at nine years old." *International Journal of Obesity* 18: 383-389.
10. Immediate family refers to a spouse/partner, a parent or a child.
11. For a household of three or four people, total household income is defined as low if it is $19,999 or under, middle income $20,000 to $39,999 and high income $40,000 or over.

CST **Many factors contribute to being underweight**

	Odds ratio[1]
Sex	
Males	*1.00*
Females	3.04*
Age	
15–19	3.78*
20–24	1.63*
25–44	1.03
45–64	0.66*
65 and over	*1.00*
Marital status	
Single, never-married	1.44*
Married, common-law	*1.00*
Widowed	0.96
Separated/divorced	1.06
Living arrangements	
Living alone	0.95
Living with immediate family	*1.00*
Living with others	1.19
Household income	
Low	1.18
Middle	1.05
High	*1.00*

* Significantly different from reference category at the 95% confidence level.

1. Presents the odds of individuals with particular characteristics being underweight relative to the odds of a benchmark group, when all other variables in the model are held constant.

Note: Italics represent reference category, for which odds ratio is always 1.00. Analysis is based on population 15 and over, excluding pregnant women.

Source: Statistics Canada, National Population Health Survey, 1998–99.

Higher proportion of current smokers among underweight Canadians

Lifestyle choices and behaviour have a powerful influence on both weight and health. Physical activity, for example, contributes to overall well-being, while smoking adversely affects health and is a strong risk factor for several diseases and mortality.

According to the 1998–99 NPHS, about 23% of both underweight Canadians and those with acceptable weight were physically active during their leisure time. The two groups also had similar proportions of moderately active and inactive members, implying that physical activity is not more likely to be associated with being underweight than with having acceptable weight.

The proportion of current smokers, however, was higher among underweight Canadians (33%) than among individuals with acceptable weight (29%). Perhaps underweight people are more likely than others to smoke because they use smoking as a method to control and lose weight.[12] In a culture that favors thinness, the temptation to use smoking to curb appetite and hence weight gain may be high for some. This is particularly so for young females, who were found to have taken up smoking for the sake of losing weight and staying slim.[13] Indeed even when other factors were held constant, the odds of an underweight individual smoking were 1.3 times the odds of a person with acceptable weight.

Underweight people slightly more likely to rate their health as fair or poor

In 1998–99, the proportion of underweight Canadians who rated their health as fair or poor was somewhat higher than that of individuals with acceptable weight: 8% versus 7%. When other factors were controlled for, the odds that an underweight person would rate their health as fair or poor were 1.3 times higher than the odds of someone with acceptable weight.[14]

12. Varner, L.M. January/February 1996. "Smoking — yet another weight loss strategy?" *Healthy Weight Journal* 13-19.
13. Crisp, A.H., C. Halek, P. Sedgwick, C. Stavrakaki, E. Williams and I. Kiossis. 1998. "Smoking and pursuit of thinness in schoolgirls in London and Ottawa." *Postgraduate Medicine Journal* 74: 473-479; Crocker, P., N. Kowalski, K. Kowalski, K. Chad, L. Humbert and S. Forrester. 2001. "Smoking behaviour and dietary restraint in young adolescent women: The role of physical self-perceptions." *Canadian Journal of Public Health* 92, 6: 428-432; Boles S. and P. Johnson. 2001. "Gender, weight concerns and adolescent smoking." *Journal of Addictive Diseases* 20, 2: 5-14.
14. An individual's subjective assessment of well-being gives a good indication of one's general health. According to some researchers, self-rated health is considered a valid and reliable indicator of health.

Underweight Canadians have higher odds of perceiving their health as poor or fair

	Odds ratio[1]
Current smoker	
Acceptable weight	*1.00*
Underweight	1.32*
Active leisure-time activity	
Acceptable weight	*1.00*
Underweight	0.88
Poor/fair self-perceived health	
Acceptable weight	*1.00*
Underweight	1.33*
Distress	
Acceptable weight	*1.00*
Underweight	1.10

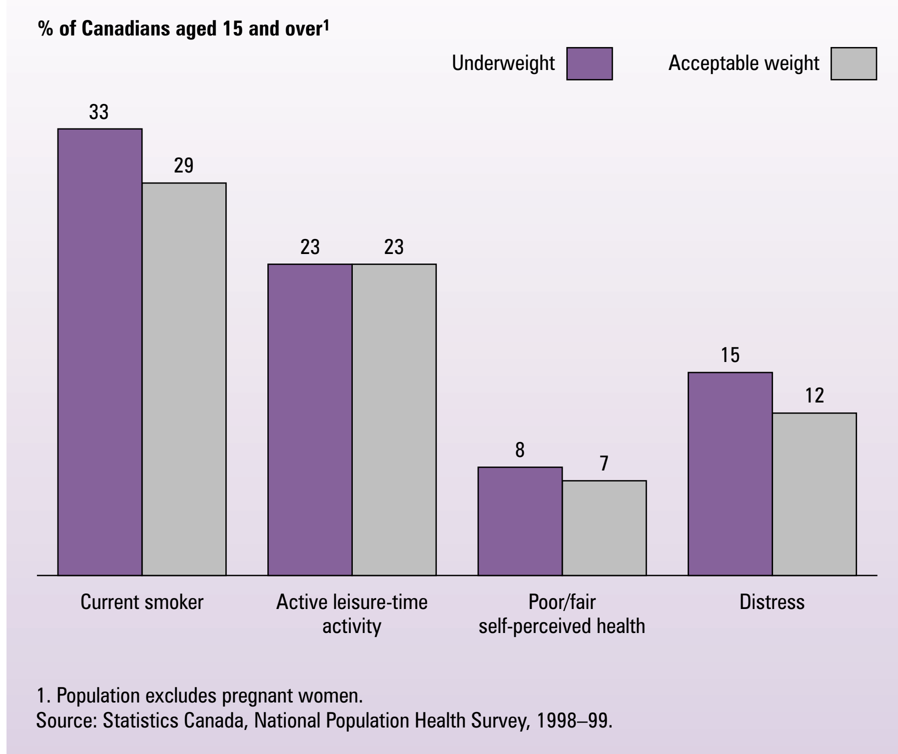
* Significantly different from reference category at the 95% confidence level.

1. Presents the odds of individuals with particular characteristics being underweight relative to a benchmark group when all other variables are held constant.

Note: Italics represent reference category, for which odds ratio is always 1.00. Analysis is based on population 15 and over, excluding pregnant women.

Source: Statistics Canada, National Population Health Survey, 1998–99.

One-third of underweight Canadians are current smokers



1. Population excludes pregnant women.
Source: Statistics Canada, National Population Health Survey, 1998–99.

People who were underweight were also more likely than those with acceptable weight to report feelings of distress (15% versus 12%). However, after taking into account the other socio-demographic variables, this difference was no longer significant.

Summary

Close to one in 10 Canadians were underweight in 1998–99, a rate slightly lower than in 1985. Underweight people were most likely to be found among youth under 25 years of age, females, singles, people living with others who are not immediate family, and those in low-income households.

When other factors were held constant, sex, age, marital status, current smoking and self-perceived health were found to be associated with being underweight. For example, the odds of being a current smoker and of having poor or fair self-perceived health were higher among underweight Canadians than among those with acceptable weight. On the other hand, the odds of being physically active and having feelings of distress were not significantly different between the two groups.

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BUILT FOR BUSINESS

On the edge: Financially vulnerable families

by René Morissette

This article has been adapted from "Families on the financial edge," *Perspectives on Labour and Income,* July 2002, vol. 3, no. 7, Statistics Canada Catalogue no. 75-001-XIE.

This article examines the extent to which Canadian families are financially vulnerable to adverse events such as a sudden loss of income or unexpected bills. Families with low income or little financial wealth have fewer resources and are more exposed than others to shocks such as permanent layoffs, unforeseen expenses, health problems and family break-up. This article first looks at families that have no financial wealth, then considers the most vulnerable families of all: low-income families with no or only modest financial wealth. This helps identify which families are likely to face short-term financial difficulties if sudden unfavourable events were to occur.

CST What you should know about this study

Data used in the preparation of this article come from the Assets and Debts Survey of 1984 and the Survey of Financial Security of 1999. In both cases, the sample represents all families and individuals in the 10 provinces, except the following: members of households located on Indian reserves; full-time members of the Armed Forces; and inmates of institutions. Data were obtained for all members of a family aged 15 years and over. Family units consist of economic families (a group of two or more persons who live together in the same dwelling and are related to each other by blood, marriage, common-law or adoption) and unattached individuals. To make the concept of wealth comparable between the two surveys, the following items were excluded from the 1999 data because they were not collected in the 1984 survey: contents of the home, collectibles and valuables, annuities and registered retirement income funds (RRIFs). For more information on concepts and definitions, see Appendices A and B of *The Assets and Debts of Canadians: An overview of the results of the Survey of Financial Security,* Statistics Canada Catalogue no. 13-595.

Assets: these include deposits in financial institutions, stocks, bonds, mutual funds, RRSPs, primary residence, other real estate, vehicles, and equity in business (the amount that would be received if the business were sold and any outstanding debts were paid).

Financial wealth: the stock of assets a family could use relatively quickly to finance consumption — without selling the house, the contents of the house or the business — following a substantial decrease in family income or unexpected expenditures.

CST Lone-parent families are most financially vulnerable

	% of persons in families with no financial wealth		% of persons in families with no financial wealth and low income	
	1984	1999	1984	1999
All family units[1]	**17**	**19**	**5**	**5**
Family type				
Unattached individuals – elderly	11	9	8	3
Unattached individuals – non elderly	28	30	15	17
Couples				
No children	14	14	2	2
Children under 18	18	19	4	4
Children 18 and over	9	17	1	1
Elderly couples, no children	3	4	1	0
Lone-parent families	34	40	21	24
Female lone-parent families	35	43	22	27
Other family types	17	18	6	4
Characteristics of main income recipient				
Age group				
24 or younger, all family types	27	43	13	23
24 or younger, families of two or more	24	40	10	16
25–34	24	30	6	9
35–44	18	19	4	5
45–54	12	16	3	3
55–64	11	10	3	3
65 or older	8	7	4	1
Education				
Not a university graduate	18	21	5	6
University graduate	13	13	3	3
Education by age group				
25–34				
Not a university graduate	25	33	7	11
University graduate	18	23	5	5
35–54				
Not a university graduate	17	20	4	4
University graduate	11	11	1	2
Immigration status				
Canadian-born	18	20	5	5
Immigrant residing in Canada	14	18	4	6
Less than 10 years	15	26	7	13
10 years or more	14	14	3	4
Age group of couples with children under 18				
25–34	24	28	5	6
35–44	17	16	3	3
45–54	12	13	3	2
Aged 25 to 54 with a long-term work disability				
Yes	...	31	...	13
No	...	20	...	4

... Not applicable.

1. Family units consist of economic families (a group of two or more persons who live together in the same dwelling and are related to each other by blood, marriage, common-law or adoption) and unattached individuals.

Sources: Statistics Canada, Assets and Debts Survey, 1984 and Survey of Financial Security, 1999.

Which families have no financial wealth?

Financial wealth is the stock of assets a family could use relatively quickly to finance consumption — without selling the house, the contents of the house or the business — should they suddenly find themselves faced with a substantial drop in family income or large unanticipated expenditures. Between 1984 and 1999, the percentage of people living in families with no financial wealth increased from 17% to 19%. This small increase, however, masks substantial increases for some family types. In 1999, people living in families whose main income recipient was 25 to 54 years of age but had no earner were the most likely to be in families with no financial wealth (44%), closely followed by members of female lone-parent families (43%) and very young families (40%).

Also at a high risk of being in a family with no financial wealth — between one-quarter and one-third of family members in 1999 — were individuals in families whose main income recipient was aged 25 to 34 and had no university degree, whose major income recipient had a work limitation, unattached individuals under 65 years old, couples with children whose major income recipient was aged 25 to 34, and immigrant families who had been living in Canada for less than 10 years.

In contrast, people in elderly families where the major income recipient was aged 65 or over were the least likely to be members of a family with no financial wealth. This is not surprising since older families have had more time and opportunity than their younger counterparts to accumulate savings and equity.

Low-income families with no financial wealth

Low-income families with no financial wealth are more financially vulnerable to adverse events than

other families; in addition to living in straitened circumstances, they also have no financial assets to draw on. Although comprising only a small proportion of the Canadian population in both 1984 and 1999 (5%), important changes occurred during this period. For example, the proportion of elderly unattached individuals having low income and no financial wealth fell from 8% to 3%, mainly due to the falling incidence of low income in this group.[1] In contrast, the proportion of people in very young families having low income and no financial wealth rose from 10% to 16%, and from 22% to 27% in female lone-parent families.

Of all individuals in families with no financial wealth, approximately 30% in both 1984 and 1999 belonged to families whose after-tax income was below Statistics Canada's low-income cut-offs. In 1999, for families with no financial wealth, the chances of living in low income were greatest for members of female lone-parent families, very young families, families of recent immigrants and non-elderly unattached individuals. The chances of being in low income were fairly low for non-elderly couples, whether they had children or not.

While very young families are relatively vulnerable, it is likely that their earnings will increase with more labour market experience, meaning that many of them will be in straitened circumstances for a relatively short time. This may not be true, however, for female lone-parent families. Previous research has shown that lone-parent families are by far the most likely to suffer persistent low income.[2] This severely limits their ability to build up savings and increase their financial wealth. The absence of a second earner poses a severe problem for these families where the parent, most often a woman, may be constrained to choose a job with shorter hours or located close to schools. Taken together, these findings

About one in four families with no financial wealth also have low income

	% of persons in low income among families with no financial wealth	
	1984	**1999**
All family units[1]	**29**	**28**
Family type		
Unattached individuals – elderly	76	39
Unattached individuals – non elderly	53	56
Couples		
No children	13	13
Children under 18	21	19
Lone-parent families	60	60
Female lone-parent families	62	63
Characteristics of main income recipient		
Age group		
24 or younger, all family types	50	53
24 or younger, families of two or more	42	39
25–34	26	31
35–44	21	26
45–54	26	16
55–64	30	31
65 or older	50	19
Education		
Not a university graduate	30	29
University graduate	20	23
Education by age group		
25–34		
Not a university graduate	26	33
University graduate	26	22
35–54		
Not a university graduate	24	22
University graduate	12	22
Immigration status		
Canadian-born	29	26
Immigrant residing in Canada	30	35
Less than 10 years	48	49
10 years or more	25	26

1. Family units consist of economic families (a group of two or more persons who live together in the same dwelling and are related to each other by blood, marriage, common-law or adoption) and unattached individuals.

Sources: Statistics Canada, Assets and Debts Survey, 1984 and Survey of Financial Security, 1999.

1. The drop likely reflects enhancements to Old Age Security, Guaranteed Income Supplement and Provincial Income Supplements which took place during the period and led to a substantial reduction of low-income rates among the elderly.

2. Morissette, R. and X. Zhang. Summer 2001. "Experiencing low income for several years." *Perspectives on Labour and Income* (Statistics Canada Catalogue no. 75-001-XPE) 13, 2: 25-35.

CST Some families with no financial wealth are not financially vulnerable

Some families may have no financial wealth but earn substantial income and, therefore, may not be financially vulnerable. For example, many young families with children may have had little time to accumulate savings since their major income recipient entered the labour market full-time. This is likely to be true especially at the end of the 1990s because young people at that time stayed in school longer than their counterparts in the mid-1980s before holding their first full-time job. Also, some families earning substantial income may have decided to make high consumption expenditures and, as a result, may have chosen to accumulate little or no financial assets for a significant period. Some other families may have had to sell all their financial assets in the past to face income interruptions occasioned by a permanent layoff or unexpected expenditures such as major repairs on the house. Still other families may have opted to put their savings into their home.[1]

1. Of all persons living in families with no financial wealth in 1984 (1999), 51% (44%) belonged to families who owned a principal residence. The corresponding percentages for persons living in families with positive financial wealth are 72% (75%).

suggest that the high financial vulnerability of many lone-parent families may be more than a temporary state.

Low-income families with modest amounts of financial wealth

While 5% of Canadians lived in low-income families with no financial wealth in 1999, an additional 5% were in low-income families with modest amounts of financial wealth. "Modest amounts" means these families would have remained in a low-income situation even if they had liquidated all their financial assets in an attempt to improve their after-tax income. Using this yardstick (low income and no or little financial wealth), the percentage of individuals in financially vulnerable families remained virtually unchanged at 10% in both 1984 and 1999.

Once again, elderly unattached individuals became less financially exposed to adverse events during the period, while the opposite was true for families of recent immigrants. In 1999, the chances of being in a family with low income and modest amounts of financial wealth were four times higher than the national average for members of female lone-parent families and seven times higher for those in prime-aged families[3] with no earner. In contrast, the chances were only 4% for persons living in families with an elderly major income recipient and only 5% for those families where the main earner was a university graduate aged 35 to 54.

The distribution of wealth of low-income families

While many would agree that financial wealth is a good indicator of financial vulnerability, most previous studies looking at Canadian families who struggle financially or live in straitened circumstances used data on low income. To what extent do low-income families also have low financial wealth? In 1999, the "typical" low-income family had a $300 "cushion" to buffer income interruptions or deal with unexpected expenditures. This is negligible compared to the median of $21,500 that was available to families not in low-income. Both in 1984 and 1999, 75% of low-income families had less than $5,900 in potentially liquid assets to help them face adverse events. Others were more fortunate — 10% of low-income families had $32,000 or more.[4]

How did the financial vulnerability of low-income families change during this period? Between 1984 and 1999 the percentage of low-income families with no financial wealth rose from 35% to 40%. At the same time, the average financial wealth of low-income families in the bottom three quartiles of the financial wealth distribution dropped by about $800 (in 1999 constant dollars). Many low-income families of the late 1990s were no better off than their counterparts in the mid-1980s, neither being closer to the low-income cutoffs nor having more financial assets.[5]

The financial vulnerability of the unemployed

One would expect families who have experienced unemployment in the

3. Prime-aged families are those in which the main income recipient is aged 24 to 54.
4. For low-income families without businesses, the corresponding amount is $19,600.
5. However, the opposite is true for the 10% richest low-income families: financial wealth rose at the 90th percentile. As a result, the proportion of low-income families with financial wealth of $50,000 or more rose from 4% in 1984 to 7% in 1999.

recent past to be more financially vulnerable than families whose major breadwinner has been steadily employed. First, workers who suffer from unemployment are generally less educated and have a lower earnings potential and, therefore, are less able to accumulate substantial savings. Second, unemployment may force a family to liquidate some of its financial assets, thereby reducing financial wealth in subsequent periods.

The data confirm this view. In 1999, more than 30% of all individuals living in families whose major income recipient had been unemployed for some time during the preceding year belonged to families with no financial wealth. This proportion is twice as high as that of individuals living in families whose major income recipient had been working full year, full-time.

Furthermore, low-income rates were roughly 10 times higher among families with substantial unemployment (six to 12 months of unemployment) than among those with no unemployment. The implication is obvious: of all individuals living in families whose major income recipient had worked full year full-time, almost none were financially vulnerable. In contrast, of all individuals living in families whose major income recipient was unemployed for at least six months in 1998, one-fifth belonged to low-income families with no financial wealth and fully one-third belonged to low-income families with modest amounts of financial wealth.

Summary

The percentage of individuals living in families with low income and little financial wealth remained virtually constant between 1984 and 1999. Nevertheless, some groups became more financially vulnerable to income interruptions and unexpected expenditures while others improved their economic position. Although the financial wealth of other families rose substantially between 1984 and 1999, the median financial wealth of low-income families did not increase; therefore, the wealth gap between low-income families and other families rose during the period. Compared to their counterparts in the mid-1980s, the vast majority of low-income families at the end of the 1990s had no more savings with which to protect themselves against adverse events.

Of all families, female lone-parent families were by far the most likely to suffer persistent low income. The most financially vulnerable families were prime-aged families with no earner. The lack of a decline in the percentage of persons living in families with no financial wealth is somewhat surprising since the Canadian population was older at the end of the 1990s than during the mid-1980s and thus, had more time to accumulative savings. Other factors that may have played an offsetting role in this phenomenon include: the growing importance of lone-parent families and unattached individuals, the increase in the length of time young people stay in school before entering the labour market, the decline in real earnings of young men, and easier access to credit. These factors may have restricted some families' savings, increased their indebtedness, or both, thereby reducing their financial wealth.

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Unmet health care needs

by J. Chen, F. Hou, C. Sanmartin, C. Houle, S. Tremblay and J.M. Berthelot

This article was adapted from "Unmet needs for health care," and "Changes in unmet health care needs" published, respectively, in the January 2002 and March 2002 issues of *Health Reports* 13, 2 and 13, 3 (Statistics Canada Catalogue no. 82-003).

It is said that one of Canada's most cherished accomplishments is its universal health care system, established to ensure reasonable access to health services for all Canadians. While the system has worked well for many years, people are now expressing some concerns about it. In 1999 over 80% of Canadians were satisfied that the health care system could meet their own and their family's needs; however, only 62% felt that it could adequately meet the needs of all residents in their province.[1] In addition, according to public opinion polls, the proportion of people who thought that health care should be the government's top priority grew from 30% to 55% between July 1998 and January 2000, reflecting increased concern about the state of the health care system.[2] In the meantime, the proportion of Canadians reporting that they did not receive the health care they thought they needed increased substantially.

CST What you should know about this study

Data for the years 1994–95, 1996–97 and 1998–99 come from the National Population Health Survey (NPHS) and for 2000–01 from the Canadian Community Health Survey (CCHS).

The NPHS interviewed Canadians aged 12 or older: over 17,000 in 1994–95, over 73,000 in 1996–97 and over 15,000 in 1998–99. CCHS data were provided by nearly 56,000 respondents aged 12 or older. Information on unmet needs from both surveys is based on self-reported experiences and so is open to interpretation. Respondents may interpret an unmet need as a situation in which they did not receive care for a health problem, or when they received care, but not at the time they felt they needed it. The validity of the data was not checked against clinical or other sources.

Unmet health care needs: The NPHS and CCHS measure self-reported unmet health care needs by asking, "During the past 12 months, was there ever a time when you felt that you needed health care but you didn't receive it?" A "yes" response was tabulated as an unmet need. This question was followed by, "Thinking of the most recent time, why didn't you get care?" and then "Again, thinking of the most recent time, what was the type of care that was needed?" Major response categories were established and the data tabulated.

Because of the wording of the question addressing unmet needs, it is not possible to distinguish situations in which people did not receive services at all from those situations in which they did not receive them in a timely manner.

1. Canadian Institute for Health Information. 2001. *National Health Expenditure Trends, 1975–2000*. Ottawa: Canadian Institute for Health Information.
2. ibid.

Access to health care is a dynamic process that involves the person seeking care, the system providing care, and the various factors that facilitate or impede this exchange. People may, therefore, not receive the care they need due to diverse circumstances ranging from the health care delivery system itself to the cost of services to their own personal circumstances and attitudes.

Based on data from the Canadian Community Health Survey (CCHS), and the National Population Health Survey (NPHS), this article focuses on the change in unmet health care needs reported by Canadians between 1998 and 2001. It describes the factors that contribute to unmet needs and explores their relationship to selected socio-demographic characteristics.

Unmet health care needs on the rise

According to the NPHS, the proportion of people aged 12 or older reporting they did not receive the health care they needed rose slightly but steadily from 4% in 1994–95 to 6% in 1998–99. Between 1998–99 and 2000–01, however, the proportion nearly doubled to reach 13%, or 3.2 million individuals. Men and women of all ages reported substantial increases in unmet health care needs.

The main reason for this increase was the large growth in the percentage of Canadians who said they had to wait a long time to get a health care appointment or treatment: the proportion grew from 23% to 30% between 1998–99 and 2000–01. However, it is difficult to determine if actual waiting times did, in fact, increase during these years or if it was only perceived waiting times that changed. According to provincial reports, the elapsed time between making an appointment and seeing the doctor lengthened in some cases, but remained relatively stable in others.

On the other hand, the percentage of individuals who claimed that their health care needs were not met because service was unavailable when or where they needed it stayed virtually the same, at around 21%. In addition, a declining proportion of Canadians attributed their unmet health needs to personal circumstances; for example, the percentage of respondents who did "not get around to it" or were "too busy" fell by several percentage points between 1998–99 and 2000–01. And the share of Canadians who said that they did not seek out care because they felt that "it would be inadequate" dropped from 13% to 5%. Other reasons for ignoring health needs, such as fear or dislike of doctors, not knowing where to go, and cost and transportation problems, did not significantly change.

People with health problems more likely to complain of long waiting times[3]

Health care needs that are not met because of lengthy waiting times or the

3. From this section on, the population covered consists of those 18 years and older, unless otherwise indicated.

CST The proportion of Canadians reporting unmet needs jumped from 23% to 30% in two years

	Population aged 12 or older reporting unmet health care needs	
	1998–99	2000–01
	%	
Reason why health needs not met		
Health care delivery		
Waiting time too long	23	30
Service not available when needed	15	14
Service not available in area	7	7
Cost and transportation		
Cost	11	9
Transportation	2[1]	2
Personal circumstances		
Did not get around to it/didn't bother	14	11
Too busy	14	10
Felt care inadequate	13	5
Decided not to seek care	5	7
Did not know where to go	4[1]	3
Dislikes or is afraid of doctors	2[1]	3
Personal or family responsibility	--	1
Other	7	19

-- Sample too small to provide reliable estimate.

1. High sampling variability.

Note: Because multiple responses were allowed, percentages do not total 100%.

Sources: Statistics Canada, National Population Health Survey, 1998–99 and Canadian Community Health Survey, September 2000 to February 2001.

unavailability of service reflect people's perceived deficiencies in health care delivery. This situation may have been exacerbated in recent years by budget cuts and system reforms, which may place a particular burden on less advantaged groups in society. However, based on analysis of NPHS respondents aged 18 or older, the prevalence of unmet health care needs resulting from inadequate health care delivery did not vary significantly, after taking account of other factors by household income, education, employment, Aboriginal status, immigrant status, age, marital status or place of residence (urban or rural).

Canadians in poor health were more likely to report long waiting times and the unavailability of services

	Population aged 18 or older reporting problems with health care delivery		Odds ratio[1]
	'000	%	
Total	**588**	**3**	
Men	*229*	*2*	*1.00*
Women	358	3	1.17
Self-reported health			
Poor/fair	149	7	1.84*
Good/very good/excellent	*439*	*2*	*1.00*
Chronic condition			
Yes	470	3	1.46*
No	*117*	*1*	*1.00*
Chronic pain			
Yes	187	6	1.45
No	*400*	*2*	*1.00*
Distress			
Yes	146	6	1.71*
No	*441*	*2*	*1.00*
General practitioner consultation in past year			
Yes	545	3	2.24*
No	*43*	*1*	*1.00*
Specialist consultation in past year			
Yes	316	5	2.33*
No	*272*	*2*	*1.00*
Doctor's authority score			
High	72	2	0.42*
Middle	413	3	0.70
Low	*103*	*4*	*1.00*
Self-care score			
High	142	2	1.07
Middle	273	3	1.20
Low	*173*	*3*	*1.00*

* Significantly different from reference group at the 95% confidence level.

1. Presents the odds of individuals with particular characteristics reporting problems with health care delivery relative to the odds of a benchmark group when all other variables in the model are held constant.

Note: Italics denote reference groups.

Source: Statistics Canada, National Population Health Survey, 1998–99.

Long wait times and the unavailability of service when and where it was needed were, however, strongly associated with an individual's health. Since people with medical problems are most in need of health care services, they are more likely than others to recognize deficiencies in the delivery of those services, particularly if their health problems remain unsolved.

For example, in 1998–99, 7% of people aged 18 or older in poor or fair health reported unmet needs related to health care delivery, compared with just 2% of people in better health. Similarly, individuals with chronic conditions, chronic pain or distress were more likely to report problems with the health care delivery system. Even when the effects of other factors were taken into account, poor or fair health, chronic conditions, and distress were associated with this type of unmet need; however, chronic pain was no longer a significant predictor of having unmet health care needs.

Compared with people who had not consulted a general practitioner or a specialist in the previous year, Canadians who had were more likely to report unmet needs due to long waiting times or service availability. Of course, physician consultations are linked to many other factors that might affect someone's health care needs, notably health status. Yet even when other factors were held constant, consultation with a general practitioner or specialist significantly increased the odds of reporting that needs went unanswered because of problems with waiting times or service availability.

CST Health Services Access Survey

On July 15, 2002 the first results of the Health Services Access Survey were released. The survey, developed by Statistics Canada, was partly funded by Health Canada and the provinces of Prince Edward Island, Alberta and British Columbia. Among other topics, the survey collected information on the difficulties reported by Canadians in accessing health care. Following are some selected results.

Some 18% (just under 4.3 million) of Canadians who needed routine care, health information and immediate care for a minor health problem encountered a difficulty of some kind. So did 23% (about 1.4 million) of those requiring specialist visits, non-emergency surgery and diagnostic tests. While the type of difficulty varied by type of service, long waits topped the list.

Just over 5% of Canadians who reported needing to see a specialist or to take a diagnostic test had waited 26 weeks or more before receiving these services. Similarly, close to 10% of those who reported needing non-emergency surgery had waited 26 weeks or more and 5% had waited for 35 weeks or longer, but the waiting time varied by type of surgery. People who needed cardiac or cancer related surgery were more likely to receive services within one month (54%) than those requiring a joint replacement or cataract surgery (20%).

Nearly one in five (18% or 900,000) people who visited a specialist reported that waiting affected their lives. The majority (59%) reported worry, anxiety or stress. About 37% said they experienced pain. The situation was similar among individuals waiting for a diagnostic test. Over 20% of those who waited for specialized services felt the length of time was unacceptable.

For more information, see *The Daily*, Monday, July 15, 2002, www.statcan.ca.

A related factor is attitudes toward physicians. People with a high level of trust in doctors were less likely than those with a low level to report that their unmet health care needs stemmed from waiting times or service availability. Even when other factors including health status and physician consultations were considered, a strong tendency to trust doctors was associated with low odds of reporting unmet needs of this kind.

Income affects unmet health needs stemming from cost or transportation difficulties

In 1998–99, slightly less than 1% of Canadians aged 18 or older (about 200,000 people) reported that they had not received the care they needed because of problems related to cost or transportation. The odds of having unmet health care needs due to these reasons were high for people reporting chronic conditions, chronic pain and distress.

Not surprisingly, having cost or transportation difficulties was also related to household income. In 1998–99, over 3% of residents in low-income households reported unmet health care needs due to these concerns, compared with only 0.3% of people in upper-middle and high-income households. Even when other factors were held constant, the odds that low-income households would report these difficulties were about 10 times higher than the odds for upper-middle and high-income households.

These results are consistent with a recent Canadian study in which low-income people, especially the working poor, said their main reason for not obtaining physician services was they believed they would be unable to afford prescribed medications. The same study also showed that lack of transportation was one reason why social assistance recipients did not see a physician.[4]

Personal circumstances and attitudes account for most unmet needs

In 1998–99, over half of individuals aged 18 or older with unmet health care needs (53%) stated that they had not pursued getting health care because they were too busy, decided not to bother, believed that care would be inadequate, did not know where to go, or disliked or feared doctors. Young people were most likely to voice these problems. Even when other factors like health status were taken into account, 18- to 34-year-olds still had significantly higher odds of reporting unmet health care needs due to personal reasons than did people aged 65 or older. Perhaps younger people's busier schedules, and different

4. Williamson, D.L. and J.E. Fast. 1998. "Poverty and medical treatment: When public policy compromises accessibility." *Canadian Journal of Public Health* 89, 2: 120-124.

attitudes toward and knowledge about health care may explain some of these disparities.

A person's attitude toward health care was, in fact, an important factor in predicting unmet health care needs. The more respondents trusted doctors' authority, the lower the prevalence of unmet needs related to personal circumstances. Even when other factors were taken into account, high regard for physician authority lowered the odds of having unmet health care needs for these reasons. Conversely, a strong tendency to rely on self-care raised the odds.

Almost 9% of people in poor or fair health had unmet needs due to personal circumstances, compared with 3% whose health was good to excellent. When taking other factors into account, the odds of reporting unmet needs due to personal circumstances were significantly higher for people in poor of fair health.

Aboriginal people living off-reserve had a higher prevalence of unmet needs due to personal circumstances and attitudes than did non-Aboriginal people: 8% versus 3%. The relationship still held when the effects of factors such as household income and health status were considered.

But although it appeared that people in low-income households were also more likely to have unmet health care needs stemming from personal circumstances than people in upper-middle and high-income households, when other factors were taken into account, the difference was not statistically significant. Similarly, the effects of education, place of residence (urban or rural) and immigrant status were not statistically significant when other characteristics were considered.

Women more likely than men to report unmet health care needs

Women were more likely than men to report that their health needs were not met due to waiting times, service availability (when and where required) and personal circumstances.

The gender gap in unmet needs related to service availability persisted when demographic and socio-economic characteristics were controlled for. However, when health status was taken into account, the difference between the sexes was no longer statistically significant. Health status, it appears, was a key factor linking gender with availability-related unmet needs, since women's self-perceived health tended to be poorer than men's.

The gender difference in having unmet health care needs related to personal circumstance and attitudes was statistically significant when the selected demographic and socio-economic factors were controlled for. But when attitudes toward doctors' authority and self-care were taken into account, the gap between men and women disappeared. Such beliefs may act as mediators linking gender with personal and attitude-related unmet health care needs.

Summary

In 2000–01, one in eight people aged 12 or older reported that they had had health care needs that were not met, up from 1 in every 24 people in 1994–95 and nearly double the rate from 1998–99. Waiting for health care services was the leading reason offered by people reporting unmet needs, and the number of people citing this reason rose substantially between 1998–99 and 2000–01.

In 1998–99, among respondents aged 18 or older, the factors associated with different types of unmet needs tended to vary. Just two factors — chronic conditions and distress — were significantly related to all three types: health care delivery, cost and transportation, and personal circumstances and attitudes. Other measures of health status and physician consultations were associated with unmet needs related to service availability and personal circumstances and attitudes. People who trusted doctors had relatively low odds of reporting unmet needs due to service availability or personal circumstances. It is not clear if this was because such people were less skeptical about health care services or because they had had positive experiences when receiving health care in the past.[5]

5. Ross, C.E. and R.S. Duff. 1982. "Returning to the doctors: The effect of client characteristics, type of practice, and experience with care." *Journal of Health and Social Behaviour* 23: 119-131.

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I still feel overqualified for my job

by Susan Crompton

Many agree that education is important for both individual well-being and economic prosperity. To survive in today's knowledge-based economy, people must be well educated and willing to continually update their skills. Indeed, over the last 25 years, the percentage of the adult population with a university degree has more than doubled. Yet, many highly educated people, particularly if they are young, feel overqualified for their job.

Overqualification concerns both workers and employers because people who hold jobs that make few demands on their skills have lower earnings and lower levels of productivity.[1] Overqualified workers may be less satisfied and more frustrated with their jobs, be absent more frequently and be more likely to quit.[2] This article uses the 2000 General Social Survey (GSS) to revisit the issue of job overqualification at the zenith of an economic expansion, focusing on workers aged 20 to 64 with postsecondary qualifications. (An earlier study, using similar concepts, looked at overqualification in 1994, a time when Canadians were coming out of the recession of the early 1990s.[3])

While other studies have examined the mismatch between the education requirements of jobs and the qualifications of workers in those jobs, this study includes two other situations that can lead to people feeling overqualified. The first occurs when the education and/or experience of the worker match the *stated* requirements of the employer, but the *actual* skills needed to do the job are lower. The second arises when the worker's education and experience match both the employer's stated and the job's actual skill requirements, but the worker is not happy because of other reasons such as wages, erratic employment or terms of employment.

Slightly more people feel overqualified in 2000 than in 1994

In 2000, almost 5.7 million employed Canadians aged 20 to 64 had a university or college degree, certificate or diploma. Some 25% of them — nearly 1.4 million — felt overqualified, compared with 22% in 1994. The percentage of postsecondary workers who felt overqualified increased despite solid gains in the economy and an aging work force, two factors that usually contribute to decreasing overqualification rates.[4] Furthermore, those who felt overqualified in 2000 did so regardless of whether they held degrees at the doctorate, master's or bachelor's level or a college diploma. In contrast, in 1994, workers with master's, doctoral or first professional degrees (27%) were more likely than those with college credentials (21%) to feel they were overqualified for their job.

In 2000, equal percentages of men and women felt overqualified (25%) compared with 26% of women and 20% of men in 1994. While there was little change in the percentage of women postsecondary workers feeling overqualified, men — particularly young men — were more likely to feel this way in 2000.

Young workers may have more reasons to feel overqualified

In 2000, young workers aged 20 to 29 with postsecondary credentials were more likely to feel overqualified for

1. Frenette, M. Spring 2001. "Overqualified? Recent graduates, employer needs." *Perspectives on Labour and Income* (Statistics Canada Catalogue no. 75-001-XPE) 13, 1: 45-53.
2. Hersch, J. 1991. "Education match and job match." *Review of Economics and Statistics* 75, 1: 140-145; Feldman, D. 1996. "The nature, antecedents and consequences of underemployment." *Journal of Management* 22, 3: 395-396.
3. Kelly, K., L. Howatson-Leo and W. Clark. Winter 1997. "I feel overqualified for my job…" *Canadian Social Trends*. p.11-16.
4. Low unemployment rates and high GDP growth rates reflected the robust economic growth in 1999–2000. In 2000, the unemployment rate for 25- to 54-year-olds with a postsecondary certificate or diploma or university degree reached a 10-year low of 4.5% compared with 7.3% in 1994.

CST What you should know about this study

The 2000 General Social Survey (GSS) surveyed about 25,000 respondents in private households in the 10 provinces. Respondents self-identified themselves as overqualified for their job by responding to the question: "Considering your experience, education and training, do you feel that you are overqualified for your job?"

This study examines individuals aged 20 to 64 with a postsecondary qualification whose main activity during the previous 12 months was working at a paid job or business. Postsecondary qualifications include earned doctoral, master's, bachelor's and first professional degrees; graduate and undergraduate university certificates and diplomas; and community college/CEGEP certificates and diplomas, and postsecondary level certificates and diplomas from similar institutions. Excluded are trade/vocational certificates and diplomas. "Postsecondary workers" or "highly educated workers" are terms used throughout the text to refer to this group. About 5,500 responses representing a population of 5.7 million postsecondary workers were included in this study.

The original 1994 data published in 1997 referred to the population with postsecondary qualifications who had a job the week before they were surveyed. This differs slightly from the population covered for overqualification in 2000. The 1994 numbers presented in this study have been recalculated to cover the same population as the 2000 data.

Work stress score: The number of areas in people's work environment that caused them excess worry or stress in the past 12 months. The score ranges from a low of 0 to a maximum of 8, counting the number of "yes" responses to the following statements: 1) too many demands or too many hours; 2) risk of accident or injury; 3) poor interpersonal relations; 4) threat of layoff or job loss; 5) having to learn new computer skills; 6) financial concerns; 7) not enough working hours; 8) anything else.

their jobs (33%) than their counterparts aged 30 to 64 (23%). Several reasons may account for this phenomenon. First, labour market researchers suggest that over-educated workers have less work experience than those whose schooling matches the job's educational requirements. As such, they may accept work that is not commensurate with their education, skills or knowledge in the hope that, once they have more experience, they will progress to higher level jobs.[5]

Second, younger workers are still finding their way in the labour market, trying out different employers, sometimes landing jobs that are not what they had expected. Over time, workers may become more skilled at finding the "right" job for them, and thus become less likely to feel overqualified.

Finally, when young graduates first start working, they may be very achievement-oriented. The most important aspects of their job are factors like the intellectual challenge, the opportunity for promotion and having responsibility and authority. Given these expectations, some young people may be disappointed by the reality of their first few years in the workforce. After some years of experience, however, other factors related to quality of life — like time, benefits and family — become increasingly important and may change their view of their job.[6]

Postsecondary graduates more likely to feel overqualified in blue-collar jobs

Feeling overqualified seems to be associated with a mismatch between the education and experience of the worker and the skill requirements of the job. Those who work in jobs closely related to their studies were much less likely to feel overqualified than workers in unrelated jobs. Because postsecondary education trains people for management, professional or semi-professional jobs, those who work in these types of jobs are less likely to feel overqualified than postsecondary graduates who work in blue-collar or clerical, sales and services jobs.

On the other hand, some studies conducted in the 1990s have suggested that people with higher educational qualifications than their jobs require may have lower levels of cognitive skills than their peers in appropriately matched jobs.[7] They may still consider themselves overqualified because they have the same expectations of a good

5. Boothby. 2002. *Literacy Skills, Occupational Assignment and the Returns to Over- and Under-education* (Statistics Canada Catalogue no. 89-552-MPE, no. 9. Statistics Canada and Human Resources Development Canada). Ottawa: Minister of Industry. p. 11.

6. Kelly, Howatson-Leo and Clark. 1997. p. 15.

7. Boothby. 2002. p. 11.

CST Slightly more workers felt overqualified for their jobs in 2000 than in 1994

	1994	2000
	% who feel overqualified for their job	
Total	**22**	**25**
Sex		
Men	20	25
Women	26	25
Level of degree, certificate or diploma		
College	21	25
Bachelor's or undergraduate	23	25
Doctorate, master's, first professional or other graduate	27	25
Age		
20–29	30	33
30–34	26	26
35–44	19	24
45–54	20	21
55–64	18	18
Men		
20–29	25	35
30–44	20	26
45–64	17	20
Women		
20–29	34	31
30–44	23	24
45–64	23	21
Provinces		
Atlantic Canada	18	23
Newfoundland and Labrador	--	15
Prince Edward Island	--	27
Nova Scotia	--	27
New Brunswick	--	23
Quebec	18	21
Ontario	26	27
Prairies	18	22
Manitoba	--	22
Saskatchewan	--	17
Alberta	19	24
British Columbia	30	31

-- Sample too small to provide reliable estimate.

Note: Includes people aged 20 to 64 with a postsecondary degree, certificate or diploma whose main activity during the previous 12 months was working.

Source: Statistics Canada, General Social Survey, 2000.

job as their peers, but they don't recognize their lower cognitive skills.

Changes in work environments may also contribute to how challenging workers feel their job is. According to the 2000 GSS, about one in four highly educated workers said their jobs had been hardly or not at all affected by the introduction of computers and automated technology over the past five years, while one in two reported that their jobs were greatly affected. Individuals whose jobs had been hardly or not at all affected were much more likely to feel overqualified (31%) than those whose jobs were greatly affected (22%) by automation. Not surprisingly, blue-collar and sales and services jobs were least affected by the introduction of automation or computers over the last five years — 41% of postsecondary workers in these types of jobs reported hardly any or no such change to their work.

Feeling overqualified also appears to be associated with having more job stress, less job security and lower earnings. According to the 2000 GSS, about 13% of postsecondary workers had a work stress score of three or higher and 9% felt it was very or somewhat likely that they would be laid off in the next year. While overall 25% of postsecondary workers felt overqualified, about one-third of those with a work stress score of three or higher, and 39% of those who thought they would be laid off in the next year, felt overqualified. Furthermore, management and professional workers were significantly more likely to feel overqualified if they had a work stress score of three or more, or if they thought they were very likely to be laid off, even though people in these occupations are typically less likely than others to feel overqualified.

Income is also a key indicator of overqualification: the lower the personal income, the greater the likelihood that a worker feels overqualified.

CST Postsecondary workers in blue-collar jobs are most likely to feel overqualified

	Postsecondary workers	
	All	Feel overqualified
	%	
Total	**100**	**25**
Occupation	**100**	
Manager/professional	*48*	*16*
Clerical/sales/service	30	36*
Blue collar	11	36*
Technologists, technicians and technical	10	23*
Type of work	**100**	
Full-year, full-time[1]	*81*	*23*
Part-year, full-time	10	36*
Full-year, part-time	6	32*
Other	2	30
Self-employed or employee	**100**	
Employee	*83*	*26*
Self-employed with no employees	10	21*
Self-employed with employees	7	14*
Level of stress in the work environment (possible scores: 0–8)	**100**	
0	*37*	*23*
1	31	22
2	19	27*
3 or higher	13	34*
How likely do you think you are to lose your job or be laid off in the next year?	**100**	
Very unlikely	*80*	*23*
Somewhat unlikely	11	27
Somewhat likely	5	33*
Very likely	4	45*
In the past five years, how much has your work been affected by the introduction of computers or automated technology?	**100**	
Greatly	*52*	*22*
Somewhat	22	24
Hardly/not at all	26	31*
Annual personal income	**100**	
Less than $40,000	*33*	*35*
$40,000–$79,999	32	18*
$80,000 and over	9	11*
Don't know/not reported	25	26*
Relationship between job and education	**100**	
Closely related	*61*	*16*
Somewhat related	18	30*
Not related	22	45*

* Statistically significant difference between this characteristic and that of the reference group in italics at the 90% confidence level.

1. Worked mostly 30 hours or more per week for 49 to 52 weeks in the reference year.

Note: Includes people aged 20 to 64 with a postsecondary degree, certificate or diploma whose main activity during the previous 12 months was working.

Source: Statistics Canada, General Social Survey, 2000.

Generally, a mismatch between job and education has a negative effect on the earnings of postsecondary workers. A 2002 Canadian report confirms the conclusions of earlier studies showing that "earnings depend crucially on the match between schooling and occupation, not on schooling alone."[8] As a result, low-paying clerical, sales and service or blue-collar jobs are the ones that postsecondary graduates are most likely to feel overqualified for.

Summary

Overqualification has a psychological dimension. Subjective indicators of overqualification, such as the self-reporting surveys used in this article, capture workers' perceptions of loss of opportunity.

The percentage of postsecondary workers who felt overqualified increased slightly between 1994 and 2000. Young people remain the group most likely to feel so. Postsecondary workers in blue-collar or clerical, sales and services jobs, as well as those who experienced high job stress or felt they were likely to be laid off, also had overqualification rates above the average.

8. Boothby. 2002. p. 28.

CST

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Obesity increasing fast among baby boom men

From 1994–95 to 2000–01, the number of obese Canadians aged 20 to 64 grew by 24% to reach 2.8 million people, about 15% of the adult population, or one out of every seven people.

Men accounted for two-thirds of the increase. In 2000–01, an estimated 1.5 million men were considered obese, up 32% from 1994–95. In contrast, the number of obese women rose 15% to 1.3 million. Obesity is on the rise for all groups except women aged 20 to 34, among whom it fell 9% during the six-year period. Increases were greatest among men and women aged 45 to 54, who accounted for one-fourth of all obese adults in Canada. Rates of obesity increase with age, and were highest in the 55 to 64 age group (19%), and slightly lower in the 45 to 54 age group (18%).

The Daily
May 8, 2002
Catalogue no. 11-001-XIE

Computer technologies

Companies that invest heavily in technology generally have employees who are more highly educated than workers in other businesses. The link between education and computer technologies is strongest at the highest levels of educational attainment and computer investments. Individuals with at least a university degree were more likely to work in companies that spent over $2,500 per employee to implement innovations in hardware or software. Moreover, recently hired workers of these companies are even more educated than their longer-tenured colleagues.

About 23% of computer users cited employer-provided formal training as the most important method in learning their main, work-related computer application. However, far more employees mentioned self-training (45%) or informal training from co-workers or supervisors (44%) as their most important learning method.

Working Smarter:
The Skill Bias of Computer Technologies, 1999
Catalogue no. 71-584-MIE, no. 3

Food consumption

Canadians are including more cereal products, low-fat milk and cream in their diets. Eating more pasta, bakery products and cereal-based snacks resulted in the consumption of grain-based products reaching 89 kilograms per person in 2001, up from 72 kilograms a decade ago.

In 2001, each Canadian drank almost 87 litres of milk, 8% less than a decade ago. Higher fat milk consumption has fallen by just over 25% during the past decade, as 1% and skim milk continue to grab larger market shares. At the same time, Canadians are increasingly turning to cream, consuming 7 litres per person in 2001, up by 2 litres per person from a decade ago. They have also increased their consumption of poultry, a naturally leaner meat, along with leaner cuts of beef and pork.

Food Consumption in Canada, Part I
Catalogue no. 32-229-XIB

Does firm size matter?

Roughly 29% of all firms had their own Web site in 2001, up slightly from 26% the year before. Large firms continue to dominate the Internet market. About 74% of large firms had a Web site in 2001, compared with 57% of medium-sized firms and only 24% of small firms.

Differences in firm size were also apparent for selling and purchasing online. The proportion of firms selling online remains low, dropping from 10% in 1999 to 7% in 2001. However, the dollar amount of online sales has been steadily increasing — from $4.2 billion in 1999 to $10.4 billion in 2001. The information and cultural industries, as well as the educational sector, were clear leaders in both Internet use and Web site ownership, regardless of firm size.

Embracing E-Business:
Does Size Matter?
Catalogue no. 56F004MIE

Distance to school and university participation

High school students living within commuting distance of a university (less than 40 km away) were almost twice as likely to pursue a university education as those living beyond commuting distance (more than 80 km away). This was the case even after differences in family income, parental education, gender and province were taken into account. One in five Canadians live beyond commuting distance of a university.

Students from families with lower income are the most negatively affected by distance. Among students from families in the lower income tier, those living within commuting distance were 4.4 times more likely to attend university than those living beyond commuting distance. In contrast, students from families in the upper income tier who lived within commuting distance were only 1.4 times as likely to attend university as their counterparts who lived beyond commuting distance.

Too Far to Go on?
Distance to School and University Participation
Catalogue no. 11F0019MIE, no. 191

SOCIAL INDICATORS

	1993	1994	1995	1996	1997	1998	1999	2000	2001
POPULATION									
Total population (July 1)	*28,703,142*	*29,035,981*	*29,353,854*	*29,671,892*	*29,987,214*	*30,248,210*	*30,499,219*	*30,769,669*	*31,081,887*
0–17 years	7,082,130	7,129,781	7,165,631	7,205,638	7,209,093	7,185,118	7,145,879	7,114,334	7,089,996
18–64 years	18,250,340	18,466,074	18,676,227	18,884,263	19,119,660	19,333,927	19,562,808	19,801,566	20,074,016
65 years and over	3,370,672	3,440,126	3,511,996	3,581,991	3,658,461	3,729,165	3,790,532	3,853,769	3,917,875
Population rates (per 1,000)									
Total growth	11.1	11.2	10.8	10.4	9.8	8.0	8.6	9.0	9.4
Birth	13.5	13.3	12.9	12.3	11.6	11.3	11.1	10.8	10.8
Death	7.1	7.1	7.2	7.2	7.2	7.2	7.3	7.2	7.4
Natural increase	6.4	6.1	5.7	5.2	4.4	4.1	3.8	3.5	3.4
Immigration	8.9	7.7	7.2	7.6	7.2	5.8	6.2	7.4	8.0
Total emigration	0.8	0.8	0.8	1.4	1.9	1.9	2.0	2.1	2.2
Interprovincial migration	9.9	9.9	9.8	9.6	9.7	9.9	9.1	10.4	10.3
Marriage	5.6	5.5	5.5	5.3	5.1	5.1	5.0	5.0	4.9
Percent growth in largest census metropolitan areas (to July 1)									
Toronto	1.4	2.0	2.0	1.9	2.2	1.9	1.8	2.0	2.5
Montréal	0.8	0.7	0.6	0.5	0.4	0.4	0.7	0.8	1.1
Vancouver	2.7	3.2	3.2	3.3	2.9	1.6	1.5	1.5	1.0
HEALTH									
Total fertility per woman	1.66	1.66	1.64	1.59	1.55	1.54	1.53	..	..
Teenage pregnancies	45,412	46,484	45,161	44,140	41,540	41,588	..	..	..
Pregnancy rate per 1,000 women aged 15–19	47.8	48.8	46.9	45.1	42.1	41.7	..	..	..
Low birthweight babies (< 2,500 grams) as % of all births	5.7	5.8	5.8	5.7	5.8	5.7	5.6	..	..
Infant mortality rate (per 1,000 live births)	6.3	6.3	6.1	5.6	5.5	5.3	5.3	..	..
Life expectancy at birth (years)									
Men	74.9	75.0	75.1	75.5	75.8	76.0	76.3	..	..
Women	81.0	81.0	81.1	81.2	81.3	81.5	81.7	..	..
*Selected causes of death for men (per 100,000 males)**									
Cancer	243.8	242.7	239.9	237.6	230.7	231.1	228.9	..	..
Lung	78.2	75.5	73.2	72.9	69.9	70.1	70.3	..	..
Colorectal	25.3	25.0	25.1	24.3	23.5	24.1	24.1	..	..
Prostate	31.3	30.7	31.0	29.0	28.4	27.9	26.7	..	..
Heart diseases	259.3	249.5	245.6	240.9	231.8	227.8	..	..	..
Cerebrovascular diseases	56.9	54.8	54.6	52.5	52.4	49.6	47.3	..	..
External causes**	68.3	65.8	66.1	64.3	60.8	61.2	63.7	..	..
*Selected causes of death for women (per 100,000 females)**									
Cancer	155.4	155.6	152.4	155.7	149.1	151.6	149.4	..	..
Lung	31.8	31.9	31.3	33.6	32.3	34.5	34.8	..	..
Colorectal	16.9	16.1	16.2	15.7	15.2	15.7	15.2	..	..
Breast	29.5	30.0	28.7	28.9	27.4	26.4	25.2	..	..
Heart diseases	141.9	139.9	137.5	135.3	130.2	126.2	..	..	..
Cerebrovascular diseases	47.8	45.9	44.9	44.3	44.2	41.9	40.0	..	..
External causes**	26.8	25.3	25.8	25.5	24.4	24.4	25.0	..	..

.. Data not available.

* Age-standardized to the July 1, 1991 Census of Population (both sexes combined).

** Includes environmental events, circumstances and conditions as the cause of injury, poisoning and other adverse effects.

Sources: Population estimates come from Demography Division, and birth and death statistics come from Health Statistics Division, Statistics Canada.

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LESSON PLAN

Suggestions for using Canadian Social Trends *in the classroom*

Lesson plan for ***"Underweight Canadians"***

Objectives

- ❑ To become aware of what the body mass index (BMI) is
- ❑ To discuss possible reasons for being underweight

Methods

1. Using the formula for BMI given in the article, have each student calculate their own BMI. Then, using the Canadian guidelines, have them calculate which weight category they belong to. Do the categories change if they now use the International guidelines?
2. Ask the class to discuss what exactly the BMI measures and to explain the circumstances under which it can be misleading.
3. According to the 1998–99 National Population Health Survey, nearly 10% of Canadians are underweight. Have the students list potential reasons why someone in their age group would be underweight.
4. Previous studies have indicated that young women tend to want to lose weight, while young men are more inclined to want to gain. Survey the class to see how many students have a positive body image. Among those who are not happy with their weight, how many would like to lose and how many to gain?
5. Have the students investigate the health implications of being underweight.

Using other resources

- ❑ For other lesson plans for Social Studies courses, check out the Statistics Canada Web site, www.statcan.ca, under Learning Resources. Select Teachers, then Lesson plans. There are more than 120 lessons available, listed by level and subject. E-STAT is now free to Canadian education institutions at http://estat.statcan.ca. Students may now access E-STAT from home. Please ask the person responsible at your school for the User Name and Password for E-STAT. To check if your school has already registered for E-STAT, visit www.statcan.ca/english/Estat/licence.htm. If your school is not a member, please ask your licence administrator to visit the licence site above.

Share your ideas!

Would you like to share your lessons using *CST* with other educators? Send us your ideas and we will send you lessons using *CST* received from other educators. For further information, contact your regional Statistics Canada education representative at 1 800 263-1136 or Joel Yan, Education Resources Team, Statistics Canada, Ottawa ON K1A 0T6, telephone: 1 800 465-1222, fax: 1 613-4513 or e-mail: joel.yan@statcan.ca. Details on regional educational support are available at www.statcan.ca/english/edu/reps-tea.htm.

Educators

You may photocopy "Lesson plan" or any item or article in *Canadian Social Trends* for use in your classroom.

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