

Family characteristics of problem kids

by Kathryn Stevenson

The teacher calls about your eight-year-old son's behaviour — again. He used to be a carefree kid who had only been involved in the playground scuffles typical of young children. You thought he would grow out of it when he started school but, instead, his behaviour has become worse. Now he's getting into daily fights, steals from other children, and is frequently disruptive in class.

In 1995, about 20% of children aged 8 to 11 (173,000 children) displayed some form of inappropriately aggressive behaviour, known formally as conduct disorder. Boys were nearly twice as likely as girls to fall into this category: 26% versus 13%. Experts generally agree that children who exhibit aggressive tendencies are more likely than others to display this behaviour during their adolescence and into adulthood. In fact, recent studies have shown that 12- to 17-year-old youths charged with a federal offence had frequently exhibited behaviour problems as children.¹ Policy makers and researchers believe that identifying the factors that predispose children to develop conduct disorder is, therefore, the first of many steps involved in reducing crime.

Using data from the 1994-95 National Longitudinal Survey of Children and Youth (NLSCY), this article examines the family circumstances of 8- to 11-year-old youngsters to assess the link between behaviour and certain family characteristics. Do children with conduct disorder, as many assume, live in low-income and lone-parent families? Do their parents use different child-rearing approaches than the parents of children who keep out of trouble? And does the age of the

mother or the number of siblings have any effect on the child's behaviour?

Parenting style makes the most difference

One of the most important influences in young children's lives is their family environment and the bond they establish with their parents — a bond closely affected by parenting practices. Most policy makers and crime prevention organizations recognize, and people intuitively acknowledge, the link between parents' and children's behaviour. In a recent public opinion survey, 64% of Canadians felt that poor parenting and broken homes were very important factors in crime.² The federal Department of Justice has identified positive child development as key to preventing children's future involvement in delinquent activities as youths or adults.³ And The National Crime Prevention Centre has stated that parenting practices that are "inconsistent,

1. For further information, see Sprott, J. and A. Doob. 1998. *Who Are the Most Violent 10 and 11 Year Olds? An Introduction to Future Delinquency*. Research paper no. W-98-29E. Ottawa: Human Resources Development Canada.

2. Environics Research Group. 1998. *Focus Canada Environics 1998-1*. Ottawa: Environics.

coercive or excessively permissive appear to maintain disruptive and aggressive behaviour in children. These practices, combined with insufficient monitoring, are associated with delinquency that begins before age 14 and persists into adulthood."⁴

Findings from the National Longitudinal Survey of Children and Youth support these conclusions. In fact, among all the variables examined in this study, parenting style appeared to have the strongest association with aggressive behaviour. This does not mean, however, that parents who use less-than-perfect child-rearing techniques from time to time — as all parents inevitably do — pay for their mistakes with delinquent kids. What makes the difference is the frequency with which the various parenting approaches are used.

Parents who employed ineffective, aversive, inconsistent or negative disciplining most of the time were significantly more likely to have children with behaviour problems than parents who utilized these approaches infrequently. For example, 63% of children whose parents very often used an ineffective technique exhibited conduct disorder, compared with 4%⁵ of children whose parents only rarely practised this kind of parenting style. When the effects of other family variables⁶ are held constant, the

3. Department of Justice Canada. 1998. *A Strategy for the Renewal of Youth Justice*. Ottawa: Standing Committee, Justice and Legal Affairs.
4. National Crime Prevention Centre. 1997. *Preventing Crime by Investing in Families: Promoting Positive Outcomes in Children 6 to 12 years old*. Ottawa.
5. Subject to high sampling variability.
6. Other variables included in this model are aversive, positive and consistent parenting styles, lone-parent versus two parent families, number of siblings, mother's age at birth of child, mother's work status and the family's socioeconomic status.

CST What you should know about this study

This article is based on data from the 1994-95 National Longitudinal Survey of Children and Youth (NLSCY). The NLSCY is conducted by Statistics Canada every two years on behalf of Human Resources Development Canada. It is designed to develop a better understanding of the factors that contribute to a child's development over time.

The 1994-95 NLSCY collected information on more than 22,500 children from newborn to 11 years living in private residences in the 10 provinces (excluding Aboriginal children living on reserves). Interviews were held with the "person most knowledgeable (PMK)" about the child (usually the mother) to gather information about the children and their families; with teachers and principals about the child's scholastic development; and with 10- to 11-year-olds themselves to learn about their experiences with family, friends and school. Information will be collected about the same children every two years until they reach adulthood.

Conduct disorder: Although there is no generally accepted and consistent definition of conduct disorder, most experts agree that it is characterized by either physical or indirect aggression against persons or property, or a severe violation of societal norms.¹ This study uses the conduct disorder scale developed by the NLSCY, which incorporates such items as frequency of fighting, threatening people and bullying other children. Following the methodology established by Offord and Lipman,² children who scored in the highest 10% of the scale were identified as having conduct disorder. In this article, "conduct disorder" is used interchangeably with "aggressive behaviour" or "delinquent behaviour."

Parenting practices: based on questions parents answered about interaction with their child, the NLSCY developed scales for four different parenting practice categories.

Ineffective: often annoyed with child, telling child he/she is bad or not as good as others.

*Aversive:*³ raising voice when child misbehaves, using physical punishment.

Consistent: disciplining the same way for the same behaviours each time.

Positive: praising the child, playing together, laughing together.

Socioeconomic status (SES): the relative social position of a family or individual. For the NLSCY, SES was derived from the level of education of the PMK, the level of education of the spouse/partner, the prestige of the PMK's occupation, the prestige of the occupation of the spouse/partner and household income. The highest SES families were in the top quartile and the lowest SES families were in the bottom quartile.

1. Measuring conduct disorder among children is complicated by the lack of benchmark crime data and by the fact that parents may not be fully aware of their child's conduct or may be unwilling to admit their child's problem behaviour to interviewers.
2. Offord, David R. and Ellen L. Lipman. 1996. "Emotional and behavioural problems," *Growing Up in Canada: National Longitudinal Survey of Children and Youth* (Statistics Canada catalogue 89-550-MPE) Ottawa: Human Resources Development Canada and Statistics Canada.
3. In the 1996-97 NLSCY, the scoring on this category was changed to reflect better parenting practices (e.g., calmly discussing problems, not using physical punishment) and the category was renamed the "rational parenting style."

Source: Statistics Canada, *National Longitudinal Survey of Children and Youth: Overview of Survey Instruments for 1994-95* (Report no. 95-02).

Children with conduct disorder	
%	
Parenting style used	
Ineffective	
Rarely	4 ¹
Sometimes	24
Very often	63
Aversive	
Rarely	7
Sometimes	22
Very often	40
Consistent	
Rarely	38
Sometimes	24
Very often	16
Positive	
Rarely	27
Sometimes	19
Very often	14

1. Subject to high sampling variability.
 Source: Statistics Canada, National Longitudinal Survey of Children and Youth, 1994-95.

odds of children displaying delinquent behaviour were 36 times higher if their parents employed ineffective disciplining techniques very often rather than rarely.

Aversive parenting techniques were associated with similar child behaviour patterns. Nearly 40% of children with parents who frequently used an aversive style exhibited aggressive behaviour compared with only 7% of youngsters whose parents were rarely aversive. And when the effects of other factors were controlled for, children whose parents regularly employed aversive parenting practices were twice as likely to display conduct disorder as kids whose parents were rarely aversive.

On the other hand, consistent and positive parenting practices were associated with less aggressive behaviour in children. Among youngsters who received consistent parenting most of the time, 16% displayed conduct disorder, compared with 38% of children whose parents rarely used consistent methods. Similarly, although to a lesser extent, 14% of children whose parents interacted positively with them most of the time demonstrated delinquent behaviour compared with 27% of children whose parents adopted positive approaches only rarely. After accounting for other factors, the odds of children exhibiting conduct disorder were 1.6 times higher for those whose parents used consistent

parenting styles infrequently. The effect of positive parenting style alone was not significant when holding all other factors constant.

Staying at home full-time may not solve all problems

In order to develop strong bonds, children require consistent supervision.⁷ When both parents work outside the home, they tend to have less time to spend with their children. As a result, it is generally believed that children in families where a parent (usually the mother) is at home tend to grow up more secure, better adjusted and are less likely to exhibit behaviour problems. It may come as a surprise, then, that families where the mother was at home full-time had the highest proportion of children with conduct disorder (more than one in five). It is likely, however, that other variables, such as lone-parent status, influenced this outcome because lone mothers are often not employed in the workforce. To be sure, when all other family characteristics were held constant, the mother’s work status proved not to be significant.

Parental education, income and job status, collectively referred to as socio-economic status (SES), are considered important variables influencing children’s development.⁸ Past studies have shown that the higher the socioeconomic status of the family, the better off the children will be. Indeed, according to the NLSCY, proportionally fewer children from the highest SES families than the lowest SES families exhibited aggressive behaviour: 13% versus 28%. When all other variables were held constant, children from these lowest SES families were twice as likely to exhibit behaviour problems as children from the highest SES families.

Many reasons may account for these patterns: high SES families have higher incomes, leading to more opportunities for children. Parents in these families also tend to be better

educated and may therefore be better equipped to foster an atmosphere of learning. In addition, the neighbourhoods these families live in probably boast higher quality schools, recreation facilities and social institutions, and offer peer groups whose similar norms and standards reinforce the parents' goals for their children.⁹

Children in lone-parent families exhibit more aggressive behaviour

Lone parents have often been identified as raising children with problem behaviours.¹⁰ Data from the 1994-95 NLSCY confirm that a larger proportion of children who lived with one parent displayed conduct disorder: about one-third of children with a lone parent demonstrated aggressive behaviour compared with less than one-fifth of those living with two parents. After holding all other factors constant, the odds of children in lone-parent families exhibiting delinquent behaviour was twice as high as the odds of those in two-parent families.

Again, complex reasons lie behind these patterns. A large percentage of lone-parent families live in low income situations. For many, enrolling their children in extra-curricular activities is simply not an option. As a result, these children may have more unstructured and unsupervised free time, and thus

7. Sacco, V. and L. Kennedy. 1994. *The Criminal Event*. Scarborough: Nelson Canada.
8. National Crime Prevention Centre. op. cit.
9. Corak, M. 1998. "Getting Ahead In Life: Does Your Parents' Income Count?" *Canadian Social Trends*, Summer 1998."
10. Lipman, E. L., D. R. Offord and M. D. Dooley. 1996. "What do we know about children from single-mother families? Questions and answers from the National Longitudinal Survey of Children and Youth," *Growing up in Canada: National Longitudinal Survey of Children and Youth* (Statistics Canada catalogue 89-550-MPE) Ottawa: Human Resources Development Canada and Statistics Canada.

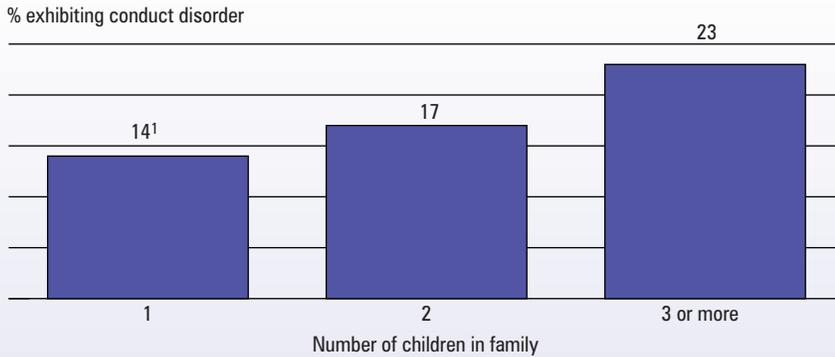
CST Many factors influence child behaviour

The table below presents the odds of children with particular family characteristics exhibiting conduct disorder, relative to the odds that a benchmark group will do so, when all other variables in the model are held constant (odds ratio). The benchmark group is shown in italics for each characteristic. A logistic regression model was used to isolate the effect of selected family variables on the child's behaviour.

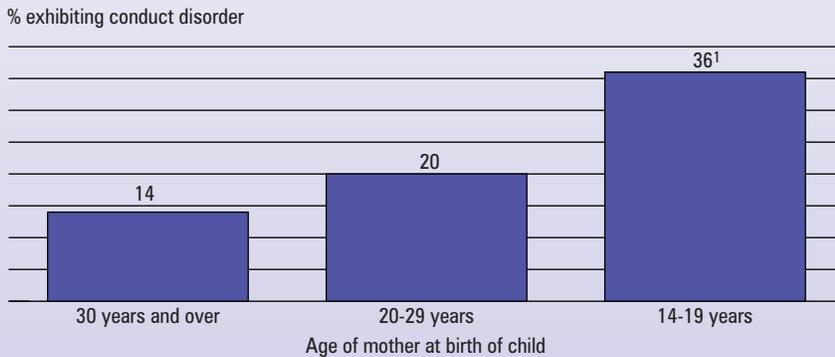
	Odds ratio
Parenting style used	
Ineffective	
Very often	36.1
Sometimes	6.7
<i>Rarely</i>	1.0
Aversive	
Very often	2.1
Sometimes	1.6
<i>Rarely</i>	1.0
Positive	
<i>Very often</i>	1.0
Sometimes	1.1 *
Rarely	1.3 *
Consistent	
<i>Very often</i>	1.0
Sometimes	0.9 *
Rarely	1.6
Number of parents in household	
One parent	2.0
<i>Two parents</i>	1.0
Number of siblings	
<i>None</i>	1.0
One	1.6
Two or more	2.6
Mother's age at birth of child	
14-20	1.1 *
21-29	1.0
30 and over	0.7
Mother's work status	
Full-time	1.1 *
Part-time	0.9 *
<i>Not in paid workforce</i>	1.0
Socioeconomic status of family	
Lower	2.0
Middle-lower	1.3 *
Middle-higher	1.2 *
<i>Higher</i>	1.0

* Not statistically significant.

Source: Statistics Canada, National Longitudinal Survey of Children and Youth, 1994-95.



... and among children born to teenage mothers



1. Subject to high sampling variability.
Source: Statistics Canada, National Longitudinal Survey on Children and Youth, 1994-95.

become more vulnerable to negative influences.¹¹ Also, parents who raise their children alone report higher levels of stress and fatigue, factors which tend to make parenting more difficult.

The number of siblings also appears to influence the child's behaviour. Children without brothers or sisters were the least likely to exhibit aggressive behaviour. As the number of siblings climbed, so did the frequency of conduct disorder, from 14%¹² of those who were lone children to 23% of those with two or more siblings. When the effect of other factors was controlled for, children with two or

more siblings were 2.6 times more likely to display conduct disorder than those who had no brothers or sisters.

Finally, it seems that the younger a mother was when she gave birth, the higher the likelihood that her children will display delinquent behaviour. Nearly 36%¹³ of kids born when their mother was a teenager (14 to 19 years old) exhibited conduct disorder, compared with 20% of children whose mother was between 20 and 29, and 14% of those whose mother was at least 30 years old. The higher probability that teenagers will have children with conduct disorder may not be related to

11. Canadian Centre for Justice Statistics. 1998. *A Profile of Youth Justice in Canada* (Statistics Canada catalogue 85-544-XPE)

12. Subject to high sampling variability.

13. Subject to high sampling variability.

age, but to other variables, such as lack of support and stability, along with low income, that are often a fact of life for young mothers. When other factors were held constant, being a teenage mother had no significant effect on the child's behaviour.

Summary

There is much public debate about the relationship between family characteristics and children with conduct disorder. Results of the 1994-95 National Longitudinal Survey of Children and Youth suggest that an ineffective parenting style is the strongest predictor of delinquent behaviour in children between the ages of 8 and 11 years. In addition, aversive and inconsistent parenting techniques, lone-parent status, low socioeconomic status, and number of siblings are also associated with a higher probability of children exhibiting conduct disorder.

These findings offer a starting point for further research. The NLSCY provides policy-makers, community workers and researchers with the tools required to examine many commonly held beliefs about the factors associated with raising a child with delinquent tendencies.

Kathryn Stevenson is an analyst in Housing, Family and Social Statistics Division, Statistics Canada.

Some gerontologists believe that continuing engagement with life, sometimes reflected as involvement at the community level, also contributes to successful aging, and is associated with better health, self-worth and connection with others.⁶ However, according to their scores, few seniors ranked above the mid-point on the social involvement scale (at least 4 out of 8); the exception, not surprisingly, was healthy seniors with healthy partners — some 68% of men and 61% of women in healthy couples. Average scores indicated gender differences in involvement in community activities: women (both healthy and ill) living with a partner in poor health had average scores higher than men in the same situation, perhaps indicating their greater desire to “get out and about.”

The fact that seniors in poor health were less likely to participate in volunteer organizations and associations, or to attend religious services, may reflect the limits imposed

by their physical restrictions: attending meetings when one’s mobility is restricted, or participating in group activities with a hearing problem, may be difficult to undertake.

There is another benefit to social interaction that seniors may enjoy. Regular use of the powers of thinking, reasoning and solving problems is central to supporting day-to-day health and independence. Some medical studies show that seniors who are involved in a variety of activities appear to have strong cognitive capacity, while those with very little social involvement report having trouble concentrating, solving problems and remembering events. Over eight in 10 seniors in healthy couples reported having no difficulty with cognitive function. In contrast, over half of seniors living in couples in poor health had at least some cognitive difficulty (for example, being forgetful, having trouble thinking clearly). This could be due to a variety of factors related to their physical condition, such as chronic pain and discomfort or the effects of medication.

Interestingly, regardless of their own health, seniors with healthy spouses were more likely to report good cognitive function than those with ill spouses.

Seniors not likely to be physically active, even if they are healthy

According to many researchers, physical fitness is also crucial to aging well: fitness boosts muscular strength, reduces the impact of other health risks, maintains bone mass and improves psychological well-being.⁷ Health benefits can be derived from walking for as little as 30 minutes a day, and cardiovascular benefits from one hour’s walking.⁸

While leisure-time exercise in its various forms — walking, gardening, swimming — provides its own rewards, one of its benefits lies in keeping seniors in shape so they can perform the regular, mundane tasks of daily life — walking upstairs, doing laundry, preparing meals or doing yardwork. In the long-term, physical fitness can reduce a couple’s dependence on out-

CST Senior men in good health living with a partner in good health were most likely to report feeling happy	% who are happy	Distress index	
		% under 7 of 24	Average score
Senior men			
In good health			
Spouse in good health	96	98	1.0
Spouse in poor health	88	98	0.8
In poor health			
Spouse in good health	77	94	2.1
Spouse in poor health	64 ¹	63 ¹	6.1
Senior women			
In good health			
Spouse in good health	90	96	1.5
Spouse in poor health	94	93	1.8
In poor health			
Spouse in good health	64	72	4.0
Spouse in poor health	60 ¹	60 ¹	5.6

Note: Seniors include middle-income homeowners in two-person households only, in which at least one spouse is aged 65 and over.

1. Subject to high sampling variability.

Source: Statistics Canada, National Population Health Survey, 1996-97.

6. Ibid. pp. 167-180.

7. Ibid. p. 98.

8. Example calculated for a 70-kilogram (154-pound) adult, using the NPHS definitions of energy expenditure at the moderate and active levels.

reduce a couple's dependence on outside help with their everyday activities.

One would not expect people with multiple chronic illnesses and an activity limitation to engage often in recreational physical activities. Indeed, about two-thirds of ill seniors with partners in poor health were physically inactive, compared with only half of healthy seniors living in healthy couples. What is somewhat surprising are the results for healthy seniors living with a spouse who is ill: two-thirds are inactive during their leisure time. This may suggest that the time available for their own activities is curtailed by the need to provide care for their partners.

Regardless of their own or their spouse's health status, women were more likely than men to be physically inactive during their leisure time: over eight in 10 women in poor health, and over half of those in good health, did not meet the basic minimum level of physical activity for maintaining their health. Some of this inactivity may be due to their inability to participate in traditional recreational activities,

but the special fitness classes now offered in many communities — aquafit, “chair aerobics” and seniors' yoga and weight training classes — may provide an opportunity for these seniors to enjoy the benefits of physical activity.

Summary

Results of the NPHS show that homeownership middle-income married seniors in poor health do not score as well on some indicators for psychological well-being (happiness, distress) as their healthy counterparts. They also report having more trouble in their day-to-day cognitive function. However, much of the malaise reported by seniors in poor health, as well as some of their difficulty with remembering things or thinking clearly, could be due to medication or chronic pain and discomfort related to their illnesses and physical limitations. On the other hand, married seniors in poor health enjoy a high level of emotional support and are just as socially engaged as those in good health.

CST The vast majority of seniors reported receiving high levels of emotional support						
	Emotional support		Frequency of contact		Social involvement	
	% at least 3 of 4	Average score	% at least 3 of 6	Average score	% at least 4 of 8	Average score
Senior men						
In good health						
Spouse in good health	96	3.8	96	4.4	68	4.4
Spouse in poor health	98	3.8	--	3.5	--	2.9
In poor health						
Spouse in good health	100	4.0	98	4.0	50 ¹	3.0
Spouse in poor health	78 ¹	3.3	82 ¹	3.6	24 ¹	1.7
Senior women						
In good health						
Spouse in good health	93	3.6	94	4.2	61	4.3
Spouse in poor health	96	3.9	97	4.4	48 ¹	3.4
In poor health						
Spouse in good health	96	3.8	100	4.2	42 ¹	2.7
Spouse in poor health	98	3.9	99	4.3	36 ¹	2.7

Note: Seniors include middle-income homeowners in two-person households only, in which at least one spouse is aged 65 and over.
 -- Sample too small to provide reliable estimate.
 1. Subject to high sampling variability.
 Source: Statistics Canada, National Population Health Survey, 1996-97.

For reasons which are not clear, higher socioeconomic status is strongly associated with good health. People in the upper-middle and upper income brackets are more likely to enjoy very good to excellent health than those in lower income groups. Researchers have proposed that this may be because high-income persons most often have a high education and are employed in less hazardous jobs; earning higher incomes also allows them greater control over their lives. Other researchers suggest that higher education helps people to better understand health risks, since well-educated people generally maintain healthier lifestyles, including more exercise, good nutrition, more medical check-ups and less risky behaviour (for example, not smoking and using seat belts).

The link between socioeconomic profile and health is less pronounced among older than younger people, but the association nonetheless persists. Among seniors, the link to socioeconomic status may not be simply the “heritage” of good or poor health from their youth, but the level of

involvement in maintaining their health into old age. Some studies suggest that seniors with higher socioeconomic status are better able to understand health education material provided by their doctors and to participate actively in making decisions about their health care. Also, the International Adult Literacy Survey showed that Canadian seniors with good literacy skills (which are strongly associated with higher income and education) are exposed regularly to a wider range of information — newspapers and magazines, books and radio — than seniors with poor skills. With many media sources now carrying health news, researchers suggest that seniors with access to more information in their daily lives may be alerted sooner to potential health problems, leading to earlier diagnosis and treatment.

- For more information, see Paul Roberts and Gail Fawcett. 1998. *At Risk: a Socio-economic Analysis of Health and Literacy Among Seniors* (Statistics Canada, Catalogue 89-552-MPE, no. 5)

The impact of a spouse's health on successful aging cannot be overlooked, since the well-being of someone close generally influences one's own state of mind. For most indicators of well-being examined, healthy seniors married to healthy people are better off than seniors in poor health married to people who are ill. The situation of “mixed health” couples is not as clear. Having a spouse who is ill does not seem to adversely affect the general well-being of healthy seniors; meanwhile, having a healthy spouse appears to be quite beneficial to seniors who are ill, especially men, suggesting that the healthy partner offers help and support that makes life more comfortable and enjoyable. Further research into this issue would be rewarding.



Susan Crompton is Editor-in-Chief and **Anna Kemeny** is an editor with *Canadian Social Trends*.

SERVICES INDICATORS

For and About Businesses Serving the Business of Canada...

At last, current data and expert analysis on this VITAL sector in one publication!

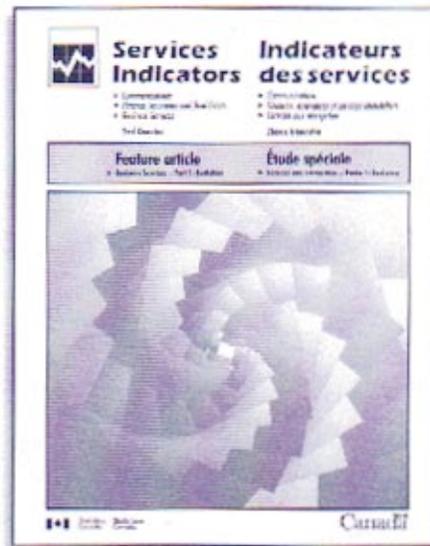
The services sector now dominates the industrial economies of the world. Telecommunications, banking, advertising, computers, real estate, engineering and insurance represent an eclectic range of services on which all other economic sectors rely.

Despite their critical economic role, however, it has been hard to find out what's happening in these industries. Extensive and time-consuming efforts have, at best, provided a collection of diverse bits and pieces of information ... an incomplete basis for informed understanding and effective action.

Now, instead of this fragmented picture, *Services Indicators* brings you a cohesive whole. An innovative quarterly from Statistics Canada, this publication **breaks new ground**, providing timely updates on performance and developments in:

- *Communications*
- *Finance, Insurance and Real Estate*
- *Business Services*

Services Indicators brings together analytical tables, charts, graphs and commentary in a stimulating and inviting format. From a wide range of key financial indicators including profits, equity, revenues, assets and liabilities, to trends and analysis of employment, salaries



and output – PLUS a probing feature article in every issue, *Services Indicators* gives you the complete picture for the first time!

Finally, anyone with a vested interest in the services economy can go to *Services Indicators* for **current** information on these industries ... both at-a-glance and in more detail than has ever been available before – all in one unique publication.

If **your** business is serving business in Canada, or if you are involved in financing, supplying, assessing or actually using these services,

Services Indicators is a turning point – an opportunity to forge into the future armed with the most current insights and knowledge.

Order **YOUR** subscription to *Services Indicators* today!

Services Indicators (catalogue no. 63-016-XPB) is \$116 (add either 7% GST and applicable PST or HST) in Canada, US\$116 outside Canada.

To order, write to Statistics Canada, Dissemination Division, Circulation Management, 120 Parkdale Avenue, Ottawa, Ontario, K1A 0T6, Canada, or contact the nearest Statistics Canada Regional Reference Centre listed in this publication.

If more convenient, fax your order to 1-877-287-4369 or (613) 951-1584 or call toll-free 1-800-267-6677 or (613) 951-7277 and charge to your VISA or MasterCard. Via e-mail: order@statcan.ca. Visit our Web Site at www.statcan.ca.

S O C I A L I N D I C A T O R S

	1990	1991	1992	1993	1994	1995	1996	1997	1998
POPULATION									
<i>Total population (July 1)</i>	27,700,856	28,030,864	28,376,550	28,703,142	29,035,981	29,353,854	29,671,892	30,010,974	30,301,185
Age 0-17	6,867,478	6,937,359	7,025,890	7,082,119	7,129,772	7,165,617	7,205,638	7,217,560	7,203,354
Age 18-64	17,712,418	17,876,300	18,054,838	18,250,347	18,466,087	18,676,242	18,884,263	19,130,082	19,360,759
Age 65 and over	3,120,960	3,217,205	3,295,822	3,370,676	3,440,122	3,511,995	3,581,991	3,663,332	3,737,027
<i>Population rates (per 1,000)</i>									
Total growth	14.0	11.4	12.9	11.1	11.2	10.8	11.0	10.7	8.7
Birth	14.7	14.4	14.1	13.5	13.3	12.9	12.3	11.6	11.4
Death	6.9	7.0	6.9	7.1	7.1	7.2	7.2	7.2	7.4
Natural increase	7.7	7.4	7.1	6.4	6.1	5.7	5.2	4.4	4.1
Immigration	7.7	8.2	8.9	8.9	7.7	7.2	7.6	7.2	5.7
Emigration	1.4	1.7	1.6	1.6	1.6	1.6	1.6	1.7	1.7
Interprovincial migration	12.0	11.3	10.9	9.9	9.9	9.8	9.6	10.5	11.6
Marriage	6.8	6.1	5.8	5.6	5.5	5.5	5.3	–	–
<i>Percent growth in largest Census Metropolitan Areas (to July 1)</i>									
Toronto	1.6	0.9	1.7	1.4	2.0	2.0	1.9	2.3	2.0
Montréal	0.9	0.6	0.6	0.8	0.7	0.6	0.5	0.5	0.5
Vancouver	2.5	2.2	2.7	2.7	3.2	3.2	3.3	2.9	1.5
HEALTH									
Total fertility per women	1.72	1.71	1.71	1.69	1.69	1.67	1.62	1.55	–
Teenage pregnancy	45,639	45,553	46,221	46,376	47,376	45,044	–	–	–
Rate per 1,000 women 10-19	24.4	24.3	24.5	24.3	24.6	23.1	–	–	–
% of low birth-weight babies	5.4	5.5	5.5	5.7	5.8	5.9	5.7	5.8	–
Infant mortality (per 1,000 live births)	6.8	6.4	6.1	6.3	6.3	6.1	5.6	5.5	–
<i>Life expectancy (years)</i>									
Men	–	74.6	74.7	74.9	75.0	75.2	75.5	75.8	–
Women	–	81.0	81.0	81.0	81.0	81.1	81.2	81.4	–
<i>Leading causes of death for men (per 100,000 persons)*</i>									
Cancer	246.6	247.5	244.0	241.0	238.9	234.7	236.6	229.7	–
Lung	79.6	78.8	77.3	77.3	74.7	72.1	72.9	69.8	–
Colorectal	25.7	25.1	25.9	24.5	24.7	24.7	24.4	23.5	–
Prostate	30.1	31.2	30.9	30.8	30.3	30.3	29.2	28.6	–
Heart diseases	269.1	263.7	256.9	256.0	244.9	238.7	239.9	230.8	–
Cerebrovascular diseases	58.2	55.8	54.4	56.2	54.3	53.5	52.9	52.8	–
External causes**	69.1	68.7	66.9	67.4	64.9	65.0	63.0	–	–
<i>Leading causes of death for women (per 100,000 persons)*</i>									
Cancer	153.1	153.7	152.7	154.0	153.9	150.3	155.0	148.5	–
Lung	27.6	29.6	29.6	31.6	31.7	31.1	33.6	32.3	–
Colorectal	17.7	16.8	16.6	16.5	15.9	16.0	15.7	15.2	–
Breast	31.3	30.1	30.4	29.2	29.8	28.4	28.9	27.4	–
Heart diseases	150.1	147.6	140.8	140.5	137.9	134.8	134.7	129.7	–
Cerebrovascular diseases	46.8	46.3	46.1	47.3	45.3	44.0	44.1	43.9	–
External causes**	26.5	26.5	25.7	26.6	25.0	25.4	25.1	–	–

– Data not available.

* Age-standardized to 1996 population.

** Includes events such as suicide, poisoning, and motor vehicle and other types of accidents.

INDEX OF ARTICLES

Spring 1995 – Winter 1999

POPULATION

1996 Census: Count Yourself In!	Spring 1996
Canada's Population: Charting into the 21st Century	Autumn 1996
Mapping the Conditions of First Nations Communities	Winter 1999
Population Projections for Census Metropolitan Areas, 1995 to 2000	Winter 1996
Projections of People with Work Disabilities, 1993 to 2016	Autumn 1996

CITIES AND PROVINCES

Canada's National Capital Region: A Profile of Ottawa-Hull	Summer 1995
Nunavut: Canada's Newest Territory in 1999	Spring 1997
St. John's: Canada's Oldest City	Winter 1997
The Historic City of Halifax	Summer 1997
Vancouver's Diverse and Growing Population	Autumn 1995

IMMIGRATION

Immigrants in Quebec	Summer 1995
Recent Immigrants in the Labour Force	Spring 1999

VISIBLE MINORITIES

Projections of Visible Minority Groups, 1991 to 2016	Summer 1996
The Chinese in Canada	Winter 1995
Visible Minorities: A Diverse Group	Summer 1995
Visible Minorities in Toronto, Vancouver and Montréal	Autumn 1999

FAMILY

Canadian Attitudes Towards Divorce	Spring 1998
Canadian Children in the 1990s: Selected Findings of the National Longitudinal Survey of Children and Youth	Spring 1997
Canadian Fertility, 1951 to 1993: From Boom to Bust to Stability?	Winter 1995
Getting Ahead in Life: • Does Your Parents' Income Count? • Does Your Parents' Education Count?	Summer 1998
Family Characteristics of Problem Kids	Winter 1999
Family Indicators for Canada	Summer 1996
Help Close at Hand: Relocating to Give or Recieve Care	Winter 1999
Leaving the Nest? The Impact of Family Structure	Autumn 1995
Living with Relatives	Autumn 1996

Moving in Together: The Formation of First Common-law Unions	Winter 1997
Moving to Be Better Off	Winter 1999
The Crowded Nest: Young Adults at Home	Spring 1999
Under One Roof: Three Generations Living Together	Summer 1999
What Influences People's Plans to Have Children	Spring 1998
Who Has a Third Child?	Summer 1999
Who Needs Short-Term Help?	Autumn 1998

SENIORS

Dementia Among Seniors	Summer 1997
Eldercare in Canada: Who Does How Much?	Autumn 1999
Government Sponsored Income Security Programs for Seniors: • An Overview • Old Age Security • Canada and Quebec Pension Plans	Spring 1996
In Sickness and in Health: The Well-Being of Married Seniors	Winter 1999
Older Canadians on the Move	Spring 1998
Seniors: A Diverse Group Aging Well	Spring 1999
Seniors Behind the Wheel	Autumn 1999
Widows Living Alone	Summer 1999

RETIREMENT

Retirement in the 90s: • Retired Men in Canada • Going Back to Work	Autumn 1996
---	-------------

HOUSING

Condominium Living	Summer 1996
Housing Affordability Problems Among Renters	Spring 1995
Housing Tenure Trends, 1951-1991	Spring 1995

LABOUR FORCE

50 Years of the Labour Force Survey, 1946-1995	Spring 1996
Attitudes Toward Women, Work and Family	Autumn 1997
Canada's Cultural Labour Force	Summer 1996
Canadians Working at Home	Spring 1996
Changes in Women's Work Continuity	Autumn 1997
Employment of People with Disabilities	Autumn 1995

INDEX OF ARTICLES (CONT.)

"I Feel Overqualified for My Job ..."	Winter 1997
Search for Success: Finding Work after Graduation	Summer 1999
Skills Deficits Among the Young	Winter 1998
Their Own Boss: The Self-employed in Canada	Summer 1995
Women, Men and Work	Spring 1995
Working Mothers	Spring 1995

INCOME

Children in Low-income Families	Autumn 1996
Declining Earnings of Young Men	Autumn 1997
In and Out of Low Income	Autumn 1998
The Consumer Price Index: A Measure of Inflation	Summer 1997

EDUCATION

Adult Literacy in Canada, the United States and Germany	Winter 1996
Distance Education: Beyond Correspondence Courses	Spring 1996
Education of Women in Canada	Winter 1995
Educational Achievement of Young Aboriginal Adults	Spring 1999
International Students in Canada	Summer 1996
Literacy: Does Language Make a Difference?	Winter 1998
Paying off Student Loans	Winter 1998
School Leavers Revisited	Spring 1997
The Class of '90 Goes to Work	Summer 1998
The Impact of Family Structure on High School Completion	Spring 1998
The Social Context of School for Young Children	Winter 1997
University Graduates at College	Autumn 1999
When Parents Replace Teachers: The Home Schooling Option	Autumn 1998

HEALTH

Alcohol Use and Its Consequences	Autumn 1995
At Work Despite a Chronic Health Problem	Spring 1999
Breast Cancer and Mammography	Spring 1998
Canada's Caregivers	Winter 1997
Causes of Death: How the Sexes Differ	Summer 1996
Changes in Cancer Incidence and Mortality	Winter 1995
Exposure to Second-hand Smoke	Summer 1998
Fifteen Years of AIDS in Canada	Summer 1996
Health and Socio-economic Inequalities	Summer 1995

Health Facts from the 1994 National Population Health Survey	Spring 1996
Melanoma	Summer 1999
Reaching Smokers with Lower Educational Attainment	Summer 1997
Sport Participation in Canada	Spring 1995
Trends in Contraceptive Sterilization	Autumn 1998
Trends in Mortality from Smoking-related Cancers, 1950 to 1991	Winter 1995
Youth Smoking in Canada	Winter 1996

JUSTICE

Excerpts from a Handbook on Crime and Justice in Canada	Winter 1996
Stalking: Criminal Harassment In Canada	Autumn 1997
Women Assaulted by Strangers	Spring 1995
Youth And Crime	Summer 1999

CULTURE AND LIFESTYLES

Are Children Going to Religious Services?	Autumn 1999
Canada's Aboriginal Languages	Winter 1998
Canadian Television in Transition	Spring 1997
Drinking and Driving: Have We Made Progress?	Summer 1998
Everyday Technology: Are Canadians Using It?	Autumn 1997
Language and Culture of the Métis People	Winter 1996
Measuring and Valuing Households' Unpaid Work	Autumn 1996
Plugged into the Internet	Winter 1999
Preparing for the Information Highway: Information Technology in Canadian Households	Autumn 1995
Religious Observance, Marriage and Family	Autumn 1998
The Leisurely Pursuit of Reading	Autumn 1997
The Persistence of Christian Religious Identification in Canada	Spring 1997
Trading Travellers – International Travel Trends	Summer 1997
Working Arrangements and Time Stress	Winter 1996

MISCELLANEOUS

Ice Storm '98!	Winter 1998
North Is That Direction	Autumn 1999
The Importance of Wildlife to Canadians	Summer 1995
Who Gives to Charity?	Winter 1996

EDUCATORS' NOTEBOOK

Suggestions for using Canadian Social Trends in the classroom

Lesson plan for “Plugged into the Internet”

Objectives

- To examine who uses the Internet and what they are using it for
- To discuss potential risks associated with use

Method

1. Take a quick poll of the class to determine who has a computer at home. What proportion of this group uses the Internet at home and how many hours per week do they use it for? What does the class primarily use the Internet for? How does this compare with the national data?
2. What impediments do students experience in using the Internet?
3. Ask the class if their parents use the Internet as much as they do and if their parents' use of the Internet differs from theirs. Discuss what factors might contribute to a generation gap in Internet use.
4. Discuss what might be the signs of an Internet addiction. Ask the class if they know anyone who has an Internet addiction.
5. Discuss with the class if the Internet helps them to learn and if they are more productive in doing assignments when they use it. What problems are encountered when using the Internet as a resource for assignments?
6. Have the class discuss valuable techniques they have found to use the Internet for school assignments. Which sites did students find particularly valuable for their last assignment?
7. Ask the class if they have ever received threats or unsolicited flames. How did they deal with them? Discuss what would be a suitable response.
8. On the board, have the class list as many “Smileys” (ASCII characters that people use to communicate nonverbal information on the Internet) as they can think of and their meanings.

e.g., :-) Smiling,
&:(Bad hair day

Using other resources

- For your next social studies project, visit the Statistics Canada website at www.statcan.ca. It will probably have valuable Canadian information for your project.

Share your ideas!

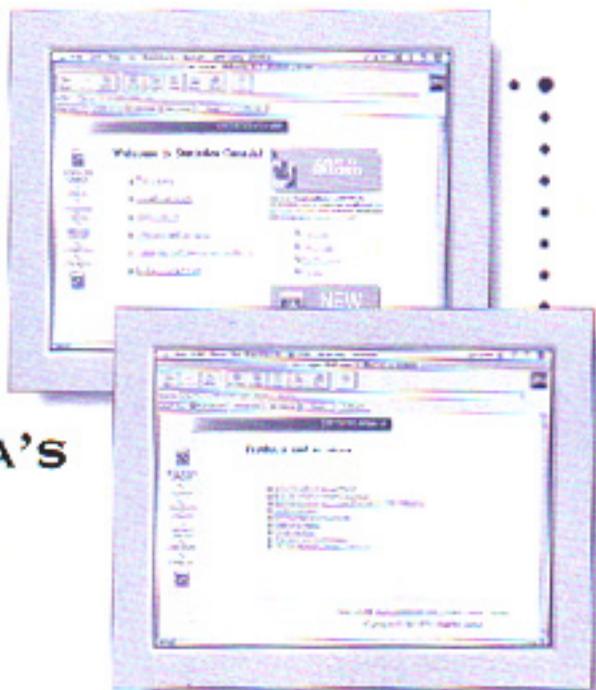
Do you have lessons using **CST** that you would like to share with other educators? Send us your ideas and we will ship you lessons using **CST** received from other educators. For further information, contact Joel Yan, Dissemination Division, Statistics Canada, Ottawa K1A 0T6, 1 800 465-1222; fax: (613) 951-4513 or Internet e-mail: yanjoel@statcan.ca.

EDUCATORS

You may photocopy *Educators' Notebook* and any item or article in *Canadian Social Trends* for use in your classroom.

GET Connected

TO STATISTICS CANADA'S ON-LINE CATALOGUE OF PRODUCTS AND SERVICES



Internet users now can link up to **Information on Products and Services (IPS)**, Statistics Canada's newly expanded on-line catalogue. Up-to-date and complete, **IPS** is a fully searchable listing of all current Statistics Canada publications, research papers, electronic products and services. It is the most extensive reference source available on all of Statistics Canada's information assets.

As part of our World Wide Web site, the **IPS** connects users to more than 2,000 entries documenting the full range of Statistics Canada products and services. With **IPS**, you find what you want, when you want it. Whether you're searching for the latest census information, health sector tables or news-breaking economic reports, **IPS** has it listed.

The Statistics Canada Web Site "is full of interesting facts and figures. There is no better place to get the big picture on the Canadian economy."

— David Zgodzinski
The Globe and Mail

Not sure exactly what you're looking for? No problem! **IPS** features a powerful **search tool** that locates thematically related products and services in a matter of seconds. Just type in the word that fits best and the system will point you to the sources where information is available. It's that easy.

YOUR INTERNET ACCESS ROUTE TO STATISTICS CANADA DATA

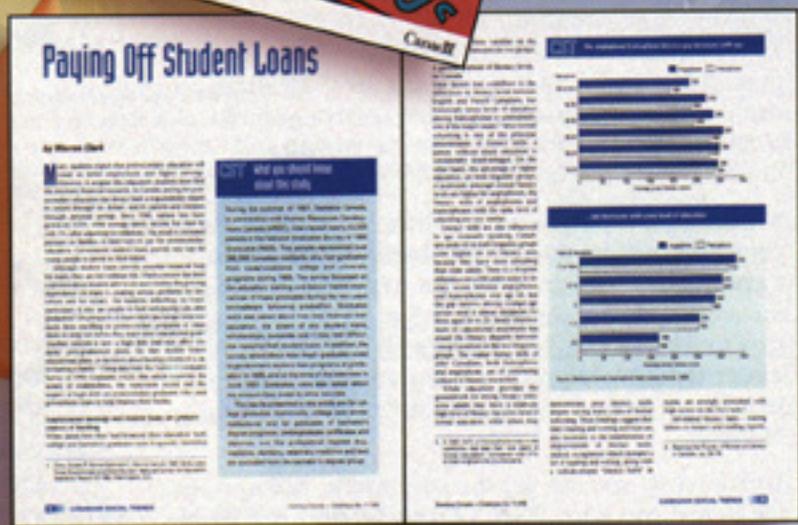
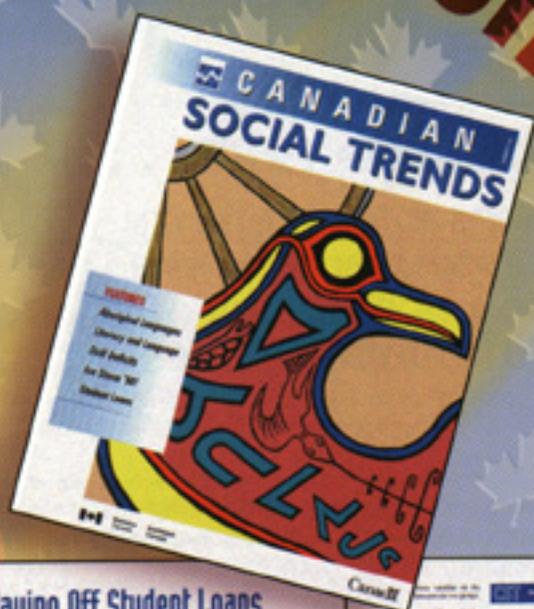
To start your search, go to "Products and Services" and then click on "Catalogue". Simple on-screen directions will guide you along.

As you will see, **IPS** provides you with key information on Statistics Canada releases: who to contact for customized data retrievals, what you can download either **free of charge** or at cost, and how you can obtain what you see listed on-screen. **IPS** also highlights time-saving features of the products and services we sell from our nine reference centres across Canada. It's the kind of information you need most when making those important purchase decisions.

Visit our Web site **TODAY** and discover how easily **IPS** can work for you.

<http://www.statcan.ca>

Canadians in the Spotlight



Society is changing rapidly. It's a constant challenge for you to stay informed about the important social issues and trends affecting us all. **Canadian Social Trends** helps you to meet that challenge successfully by bringing you dynamic and invaluable social analysis in a clear, concise and highly readable format.

Each issue of this popular Statistics Canada quarterly brings key elements of Canadian life into the spotlight — care-giving, literacy, students, young families, ethnicity, seniors. The easy-to-read articles draw from a wide range of demographic, social

and economic data sources. Tables and charts highlight key points. A Social Indicators table tracks change.

Social science professionals, researchers, business and policy analysts, educators, students and the general public rely on

Canadian Social Trends. Subscribing today will help you keep abreast of change, evaluate social conditions, plan programs or services and much more!

Visit the "In-Depth" section of our Web site at www.statcan.ca to view some recent articles.

Subscribe today! You won't want to miss a single issue!
 Only \$36 (plus either HST or GST and applicable PST) annually in Canada and US\$36 outside Canada! To order **Canadian Social Trends** (Cat. No. 11-008-XPE), write to Statistics Canada, Dissemination Division, Circulation Management, 120 Parkdale Avenue, Ottawa, Ontario, Canada K1A 0T6 or contact the nearest Statistics Canada Regional Reference Centre listed in this publication. If more convenient, fax your order to 1 800 889-9734, call 1 800 267-6677 or send an e-mail: order@statcan.ca.
 Subscribe on our Web site to the downloadable version of **Canadian Social Trends** (Cat. No. 11-008-XIE) for only \$27 in Canada, US\$27 outside Canada.
 URL: www.statcan.ca/cgi-bin/downpub/feepub.cgi.