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## School Performance of Children from Immigrant Families

Children of immigrant parents start school with less-developed reading, writing and mathematics skills than their classmates with Canadian-born parents. But they overcome this disadvantage before the end of elementary school. This is one of the main findings of [School performance of children from immigrant families, 1994-1998](#) a study prepared by Statistics Canada Research Fellow and Carleton University economics professor Christopher Worswick. The research used data from the National Longitudinal Survey of Children and Youth from 1994 to 1998 to assess the academic performance of children of immigrants in reading, writing and mathematics, as well as their overall aptitude.

Student performance was based on the teacher's assessment. Children were deemed to have high performance if the teacher rated the child as being either "near the top of the class" or "above the middle of the class, but not at the top." Children were deemed to have low performance if the teacher rated the child as being in the middle, below the middle, or near the bottom of the class. The study also examined student performance based on the parent's assessment and on the results of a number of tests designed to assess vocabulary, reading, writing, and math skills. Generally, the findings were the same regardless of the source.

Worswick's work shows that mother tongue has an impact on school performance in the child's early years. Children from immigrant families whose parents' mother tongue was neither English nor French faced significant disadvantages in the first years of elementary school, but they made significant gains with each passing year. Teachers were much less likely to consider these students as being near the top of the class or above the middle of the class than their classmates with Canadian-born parents. Their mathematics and reading skills were some 20% lower and their writing skills almost 30% lower. However, by age 10 or 11, these children were considered to be performing as well as their classmates in all three areas.

Children from immigrant families whose parents' mother tongue was one of the official languages had similar experiences, but not to the same degree. They were about as likely to be above the middle of the class in mathematics when they started school, but 10% less likely in writing, and about 20% less likely in reading. By the age of 9, they had caught up to, and even fared a bit better than, their classmates with Canadian-born parents.

All of these results reflect average differences between children of immigrant parents and those with Canadian-born parents. There may be large variations underlying these averages. Children of parents with high levels of education had above-average performance in school, according to the study. Children with a parent who had only an elementary-level education fared worse than children whose parents' highest education was a high school diploma. They had 10% lower performance in reading, 12% lower performance in writing, and 14% lower performance in mathematics. Children with a parent who had a university degree did significantly better than children whose parents' highest education was a high school diploma. They had 20% higher performance in reading, 17% higher performance in writing and 21% higher performance in mathematics.

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Immigrant parents were more likely to have both lower and higher levels of education than Canadian-born parents. About 7% of children of immigrant parents whose mother tongue was neither English nor French had a parent with no more than elementary-level education. This compares with 3% for children of Canadian born parents. However, children of immigrant



parents were also more likely to have a parent with a university degree: 23% of children of immigrant parents with neither official language as a mother tongue, 23% of children

of immigrant parents with either English or French as a mother tongue, compared with 15% of children of Canadian-born parents. □

## Dropping out of High School on the Decline

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Canada's high school leaver rate—the proportion of 20-year-olds who have not completed high school and are not working towards its completion—fell sharply throughout the 1990s according to an analysis by Statistics Canada researcher Kathryn McMullen recently published in [At a Crossroads: First results for the 18 to 20 year-old cohort of the Youth in Transition Survey](#). As of December 1999, the school leaver rate stood at 12%, down one-third from 18% in 1991. The 12% rate represents an estimated 48,400 men and women aged 20. An additional three percent of 20-year-olds were still in high school as of December 1999, while the remainder, almost 85%, had completed the requirements for graduation.

The study, based upon the Youth in Transition Survey, paints a statistical portrait of young people aged 18 to 20 as they move from school into postsecondary education and the labour force. A comparison with the 1991 School Leavers Survey shows that the decline in the school leaver rate during the decade was greater for men than for women. The rate for men fell from 22% in 1991 to just under 15% as of December 1999. The rate for women declined from 14% to about 9%. The rate also fell in every province, and in most cases the decline was substantial. The Atlantic provinces experienced the largest decline, with the largest reduction occurring in New Brunswick, from 20% to just under 8%. Saskatchewan had the lowest school leaver rate in 1999 at just over 7%.

The school leaver rate is based on youth aged 20 because some young people were still continuing their education after the typical age of graduation (generally 18 but 17 in Quebec). Focusing on 20 year olds takes into account the “second chance” system in Canada, whereby some youth who drop out return to complete their studies at a later age. School leaver rates are higher among 18-year-olds.

Poor academic performance is only one reason for dropping out. On average, high school dropouts have lower grades than graduates. Male dropouts, in particular are more likely to have low grades and to have repeated a grade in elementary school. But not all dropouts have low grades. In fact, almost half obtain a B average or better. High school graduates are more likely than dropouts to have lived in two-parent families during high school, while dropouts are more likely to have come from single-parent families. Dropouts are three times as likely as graduates to have had parents who had not finished high school.

Compared to graduates, dropouts are less engaged in school, both academically and socially. They are less likely to have had close friends who pursue education past high school, and are

more likely to skip class, drink alcohol regularly and use drugs frequently. These factors certainly dominate as reasons for failing to complete high school, but there are also other reasons. Some young men just want to work; some young women cite pregnancy and child-rearing.

While the proportion of youth who do not complete high school is of significant concern, especially in the context of growing social and economic demand for higher levels of education, it is encouraging that most youth chose to pursue some form of postsecondary education after high school. As of December 1999, 52% of 18 to 20 year olds (about 544,000 individuals) had left high school and were attending some form of postsecondary educational institution. Close to half of them attended a community college or CEGEP in their first year; about one-third attended university; the balance attended a range of other non-university postsecondary institutions such as technical, trade or vocational schools, university colleges or private business or training schools.

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Women are more likely to continue their studies than men. About 57% of women aged 18 to 20 were pursuing postsecondary education compared with 47% of their male counterparts. Postsecondary participation rates are above the national average in only three provinces: Quebec (62%), Nova Scotia (58%) and Newfoundland (54%), while Alberta (42%), Manitoba (44%), and Saskatchewan (46%) have the lowest percentages of youth aged 18 to 20 enrolled in postsecondary programs.

These students rely on a wide variety of funding sources during their first year, the most common being earnings from employment. Compared to postsecondary graduates and postsecondary leavers, high percentages of current postsecondary students also fund their studies with money from their parents or partner, from scholarships, awards or prizes, from personal savings and from government-sponsored student loans.

Post secondary participants generally have positive attitudes and relationships during their first year, but postsecondary leavers tend to be much less positive than continuers in terms of their academic “fit”. They are unsure of what they want to do and are unhappy with their program. This is reflected in counter-productive behaviours like skipping classes and thinking about dropping out. □

## Do Neighbourhoods Influence Long-Term Labour Market Success?

The neighbourhood that teens from low-income families grow up in plays little or no role in determining chances for self-sufficiency or long-run economic success. Neighbourhood quality does affect residents' exposure to crime, but the most important determinants of the long-run success of teenagers are to be found within families not outside of them in the community. In [Do Neighbourhoods Influence Long-Term Labour Market Success? A comparison of Adults who Grew Up in Different Public Housing Projects](#) Philip Oreopoulos, a Doctoral candidate at the University of California at Berkeley and a holder of a Statistics Canada Research Stipend, uncovers these findings by following a group of teenagers who grew up in substantially different types of public housing projects in Toronto. The teens were first observed at 16 years of age during the early to mid 1980s and followed up to the age of 35 during the late 1990s.

Oreopoulos's study is the first in Canada to recognize that uncovering neighbourhood effects on the well-being of children is very difficult because it is hard to know why two similar families choose to live in different neighbourhoods. Without this information it is easy to misinterpret differences in child outcomes by accidentally attributing the impact of unobservable family characteristics to neighbourhood circumstances. In recognition of this difficulty some studies in the United States have actually been based upon programs that randomly allocate children and their parents to good and bad neighbourhoods. Subsequent differences in behaviour and outcomes can be more directly attributed to neighbourhood quality. "Experiments" of this kind are notoriously difficult to conduct and there are no examples in Canada, but Oreopoulos recognizes that the rules governing the allocation of units in some public housing programs implicitly permits a similar type of analysis.

Families in the Toronto public housing program had only limited choice in the housing project they were assigned, and this restriction makes a comparison of child outcomes across different projects easier to attribute to the quality of the surrounding neighbourhood. Some housing projects, where thousands of low-income households live, have high levels of crime. Many other projects were built to accommodate less than a few hundred individuals and are in areas more populated by middle income homeowners. As a result households with similar characteristics are often placed in substantially different

neighbourhoods depending mainly on how many bedrooms they needed and which projects became available when they were at the top of the waiting list. Because of this the author is much more confident that any differences in child outcomes reflect the impact of neighbourhood quality rather than unobserved family circumstances.

In fact, about half of all households from the neighbourhoods in which the largest public housing projects were located had incomes that were below Statistics Canada's Low-Income Cut-off, while only 15.5% in which the smaller projects were located were in a similar situation. The median family income for households around the smaller projects was four times greater than that for the largest projects. Crime activity also differed greatly across projects. For example, there were no sexual assault occurrences on smaller public housing properties, while the number of such assaults that occurred on public housing property in the largest projects was 1.45 per 1,000 households.

In spite of these differences in neighbourhood characteristics children from the smaller housing projects gained no significant economic advantage in adulthood over those from the largest projects. Average income between the ages of 27 to 35 for those who grew up in the large projects was \$20,950, compared with \$21,460 for those from the smallest projects, only a 2% difference. Social assistance participation was also similar between the two groups: 32% of teens from the largest projects relied on social assistance for at least one year between 1993 and 1999, compared to 31% of those from the smallest projects. The average years of schooling for those 16 to 25 in the largest projects was 12.3 years, again about the same (12.2 years) as those in the smallest projects. The proportion not working and not attending school was also essentially the same across the two groups.

While all the teens came from similar low-income backgrounds and were living in public housing, there was a large variation in their educational attainment and income as adults. Neighbourhood differences explain none of this, but family differences can account for as much as 30%. That being said the study did not examine a host of other outcomes—such as overall satisfaction with life, drug use, health and crime—that may also be important. □

## In Brief

### [Trends in the Use of Private Education](#)

Most children who attended private schools are either from families with incomes of less than \$50,000 or more than \$100,000, according to a new analysis of education data prepared by Garth Lipps and Miles Corak. Nationally, 29% of children who attended private schools were from families with incomes below \$50,000 while 26% were from families with at least twice as much income. In contrast, 43% of children attending public schools had family incomes of less than \$50,000 and only 12.4% had family incomes of over \$100,000. (In

1997 one half of families with school aged children earned less than \$52,000.) In Ontario, the largest proportion of children attending private schools were from high income families. About 37% of all children attending private schools came from households with incomes of \$100,000 or more, the highest proportion of any province. This was more than twice the percentage of children (16%) that came from high-income households and attended public schools. Roughly, one-fifth of private school students came from families with less than \$50,000 in income, while 43% of public schools were from this group. In 1997/98, one out of

every 19 children in Canada attended a private school for elementary or secondary education. In total, 288,000 were enrolled in private schools, while just over 5 million went to public schools. Quebec had the highest enrolment in private schools, just over 100,000 (or 9.2% of children) were enrolled in a private elementary or secondary school in 1998/99. □

### [Saving for a Post-secondary Education](#)

The vast majority of parents hope their children will get some form of college or university education, but as Kathryn McMullen finds in an analysis of the

Survey of Approaches to Educational Planning, only about half of them are setting aside savings to this end. Not surprisingly, the gap between aspirations and savings behaviour was widest in households at the lowest end of the income scale. In addition, the amount of money most parents have been putting aside is substantially short of current estimated costs. As a consequence, even if they had savings, most parents expected that their children would require additional financial resources to pay for their post-secondary education, either through loans or working. □

### [Are the Kids All Right?](#)

In this study, Miles Corak presents a framework for thinking about intergenerational mobility as it relates to the relationship between parent and child incomes as well as evidence on the degree and sources of income mobility across the generations in Canada.

Canadian society is characterized by a good deal of intergenerational mobility, and the available evidence suggests that being raised in low-income does not pre-ordain children to low-income in adulthood. Canada compares well in this regard to many other countries, being characterized by at least as much if not more mobility than the US or UK and on a par with some of the most mobile European nations. The sources for this pattern have to do with access to high quality education, and high quality non-monetary investments in children. However, there is no clear evidence linking the level of family income to the nature of these investments. □

### [Pursuing Further Post-secondary Education](#)

Nearly 60% of 1990 bachelor's graduates had taken or completed some further postsecondary education by 1995, five years after graduating. An analysis by

George Butlin sheds light on the decision to study after having attained a bachelor's degree. Over three-quarters of graduates who took further postsecondary education did so by 1992, within two years of graduation. Nearly a third of graduates who took further postsecondary education enrolled in master's or doctoral programs, while close to a quarter of students engaged in another bachelor's degree program. Fully 20% took programs at college or trade-vocational institutions. Bachelor's graduates who had a university-educated parent had higher odds of participating in master's programs or first professional education than graduates who had a high school-educated parent. Graduates from fields of study that had a specific job associated with them—such as education, commerce, management, business, engineering, and health professions—had lower odds of participation in further postsecondary education than graduates from social science programs. □

## Further Reading

Many of these publications are available at [www.statcan.ca](http://www.statcan.ca) by searching on the author's name or by forwarding a request to < [fls-info@statcan.ca](mailto:fls-info@statcan.ca) >

Michael Bordt, Patrice de Broucker, Cathy Read, Shelley Harris and Yanhong Zhang (2001). "Determinants of science and technology skills." [Education Quarterly Review](#). Vol. 8, No. 1. Statistics Canada.

Sylvain Noël and Patrice de Broucker (2001). "Intergenerational Inequities - A comparative analysis of the influence of parents' educational background on length of schooling and literacy skills." In Walo Hutmacher, Douglas Cochrane and Norberto Bottani (eds). *In Pursuit of Equity in Education - Using international indicators to compare equity policies*. Kluwer Academic Publishers.

George Butlin (2001). "1990 bachelor's graduates who pursue further postsecondary education." [Education Quarterly Review](#). Vol. 7, No. 2. Statistics Canada.

Miles Corak (2001). "Death and Divorce: The Long-Term Consequences of Parental Loss on Adolescents." *Journal of Labor Economics*. Vol. 19, No. 3. Also published as [Statistics Canada, Analytical Studies Research Paper No. 135](#).

Miles Corak (2001). "Are the Kids All Right? Intergenerational Mobility and Child Well-being in Canada." In Keith Banting, Andrew Sharpe, and France St-Hilaire (editors). *Review of Economic Performance and Social Progress*. Montreal and Ottawa: Institute for Research on Public Policy and Centre for the Study of Living Standards. Also published as [Statistics Canada, Analytical Studies Research Paper No. 171](#).

Nathan Grawe (2001). "In Search of Intergenerational credit constraints among Canadian men: Quantile versus mean regression tests for binding credit constraints." [Statistics Canada, Analytical Studies Research Paper No. 158](#).

Euan Phimster, Esperanza Vera-Toscano, Alfons Weersink (2001). "Female employment rates and labour market attachment in rural Canada." [Statistics Canada, Analytical Studies Research Paper No. 153](#).

Kathryn McMullen (2001) "Survey of Approaches to Educational Planning, 1999." [The Daily, Statistics Canada, April 10](#).

Kathryn McMullen and Jeffrey Bowlby (2002). [At the Crossroads: First results for the 18 to 20 year-old cohort of the Youth in Transition Survey](#). Statistics Canada and Human Resources Development Canada.

Garth Lipps and Miles Corak (2001). "Trends in the Use of Private Education, 1987/88 to 1998/99." [The Daily, Statistics Canada, July 4](#).

Philip Oreopoulos (2002). "Do Neighbourhoods Influence Long-term Labour Market Success? A Comparison of Adults Who Grew Up in Different Public Housing Projects." [Statistics Canada, Analytical Studies Research Paper No. 185](#).

Christopher Worswick (2001). "School Performance of the Children of Immigrants in Canada 1994/98." [Statistics Canada, Analytical Studies Research Paper No. 178](#).

John Zhao and Patrice de Broucker (2001,2002). "Participation in postsecondary education and family income [The Daily, Statistics Canada, December 7](#) and [January 9](#)." □

## What's New

### Empirical Issues in Canadian Education

Fifty-five researchers, education policy makers and members of stakeholder groups gathered at Statistics Canada to present and discuss issues in education. The conference was held in November 2001 and was sponsored jointly by Statistics Canada, the John Deutsch Institute at Queen's University and the Western Research Network on Education and Training. Statistics Canada researcher Patrice de Broucker worked with Arthur Sweetman of Queen's University to organize a program that had three goals: (1) to present policy relevant reviews of the current state of research on issues related to education and educational outcomes in Canada; (2) to foster relationships between policymakers and academic researchers from a variety of backgrounds; and (3) to allow participants to share ideas about future research. The conference proceedings has been published under the title *Towards evidence-based policy for Canadian education*, McGill-Queen's University Press.

### PhD Stipend Program invites Applications

The Statistics Canada PhD Stipend program is accepting applications for the 2002/03 academic year. This program, now in its fifth year, offers support to PhD candidates working on their theses who are interested in using one of a variety of newly available micro data, including both longitudinal surveys and administrative data. Through this program students have the opportunity to work at the Ottawa headquarters of Statistics Canada and are offered limited financial support. The program seeks not only to offer PhD students access to survey and administrative data to complete work associated with their theses, but also to promote awareness of the these data and the workings of Statistics Canada to a group of future Canadian researchers as well as to the general research community. The application deadline is April 15<sup>th</sup>. For details see [www.statcan.ca/english/edu/stipend.htm](http://www.statcan.ca/english/edu/stipend.htm)

### Visitors and Speakers

Recent visitors and speakers to Statistics Canada have included:

- Joshua Angrist of MIT on "Establishing Causal Relationships"
- David Card of the University of California at Berkeley on "Alternative Approaches to Estimating the Return to Education"
- Thomas Lemieux of the University of British Columbia on "Nonparametric Decomposition of Distributions"
- Rajeev Dehejia of Columbia University on "Matching Methods and the Propensity Score"
- Roland Thomas of Carleton University on "Implications of Complex Survey Design for Analysis"
- Bruce Meyer of Northwestern University on "Natural and Quasi-Experiments" ■

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