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Group Differences in Educational Attainment Among the Children of Immigrants

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Abstract

Using the 2002 Ethnic Diversity Survey, this article examines the group differences by national origin in university educational attainment among the children of immigrants in Canada. We found that children of immigrant parents in most source region groups achieve higher university completion rates than children of Canadian-born parents, partly due to higher education levels of their parents. Children of Chinese and Indian immigrants particularly attain higher academic achievements than children of Canadian-born parents. Parental education was also important in explaining the relatively low university completion rates among the second-generation Portuguese.

Keywords: ethnic groups, second generation, university education

Executive summary

This study examines the group differences in university educational attainment in an increasingly diverse segment of Canada's population, namely, the children of immigrants. It also examines the extent to which parental human capital and group level economic resources for these groups account for differences in university completion rates.

Determining the group differences in educational attainment among the second generation of immigrants is vital for understanding why some groups succeed while others may lag behind. Large group differences in educational attainment would have significant impact on inequality in other socioeconomic dimensions, particularly in occupational attainment and earnings.

This study provides a comprehensive analysis of group differences in university completion rates across a large range of immigrant source country/region groups. These include eight non-Western countries/regions: Africa, the Caribbean, Latin America, China, the Philippines, India, West Asia/Middle East, and other Asia. There are also 10 groups from the Western countries: the United States, the United Kingdom, Germany, Italy, Portugal, the Netherlands, other Northern/Western Europe, Eastern Europe, other Europe, and other countries (mostly Oceania).

Data for this study came from the 2002 Statistics Canada Ethnic Diversity Survey (EDS). This study focuses on a sub-sample of about 3,300 young adults aged from 25 to 34 who are either Canadian-born children of at least one immigrant parent or who immigrated to Canada at age 12 or younger. This study includes 2,689 children of Canadian-born parents as the comparison group.

Children of Chinese and Indian immigrants had higher university completion rates than children of Canadian-born parents, even when demographic and human capital factors are controlled for. The university completion rate among children whose parents were from the Philippines, United States, and Germany was significantly lower than that among children of Canadian-born parents when demographic and human capital factors are controlled for.

1 Introduction

This article examines the group differences in university educational attainment in an increasingly diverse segment of Canada's population, namely, the children of immigrants. The diversity is expanding due to large shifts over the last four decades in source countries from which immigrants originate. Shifts in the source countries were spawned by the changes in the immigration regulations in the 1960s that removed barriers to allow newcomers from non-European countries, including Asia, Africa, Latin America and the Caribbean. It is projected that by 2017, visible minorities will constitute 20% of Canada's total population (Statistics Canada 2005). Determining the group differences in educational attainment among the children of immigrants is vital for understanding why some groups achieve successful adaptation while some may lag behind other groups (Kao and Thompson 2003). The different pathways toward achieving university education among the second generation have important implications for their relative socioeconomic status in Canadian society.

Research pertaining to the group differences in academic achievement has mostly originated in the United States (Portes and Rumbaut 2001; Zhou and Xiong 2005; Portes, Fernández-Kelly and Haller 2005). These studies show substantial group differences in educational achievement that consistently point to better performance of some groups—for example, the Chinese, the Koreans (Zhou and Kim 2006), the South Asians (Xie and Goyette 2003) and the Cubans in Miami (Portes and MacLeod 1996)—while others exhibit signs of low achievement, such as Blacks (Duncan 1994), Mexican Americans (Rumberger and Larson 1998) and Laotians and Hmong (Miller 1995). The explanations for these group differences in the United States have been noted to include financial and human capital, family structure, community resources, cultural relations, as well as external factors such as racial stratification and economic opportunities (Zhou 1997).

Few Canadian studies have examined group differences in educational attainments (Sweetman and Dicks 1999, Reitz and Sklar 1997, Hou and Balakrishnan 1996). Studies on the second generation point to the success of this group as a whole, with educational attainments and occupational status similar to or exceeding the achievement of the third generation (Boyd 2002, Boyd and Grieco 1998). While these studies signal the potential for successful schooling adaptation, we do not know whether this also translates to group differences in university educational attainment. Since the population composition and education system in Canada are quite different from those of the United States, it is not clear whether some groups who are exemplars of successful adaptation there also exhibit the same mobility patterns in Canada, nor which ones display trends that are different from those observed in the United States.

Using large national representative survey data, we examine the extent to which the group inequality in university educational attainment is also observed in Canada and the saliency of structural and cultural factors that explain some of these differences. Our study is unique in that we provide a comprehensive analysis of group differences in university completion rates across a large range of immigrant source regions. We examine the extent to which parental human capital account for these differences in university completion rates.

2 Theoretical framework

Researchers working within the human-capital framework assert that highly educated parents have the financial and non-monetary resources to invest in their children's abilities early on, which inevitably places them on track not only for better school performance but also for the likelihood of pursuing a university education (Corak 2001). Heckman (2000) points to the centrality of family factors that accumulate over many years from early childhood through adolescence, which consequently produce the skills and expectations for university attendance. Those who have the lowest academic achievement are usually the ones whose parents possessed low levels of education and skills at the time of migration (Kao and Thompson 2003). Family socioeconomic status has been noted as a major influence in explaining the difference in high school drop-out rates and postsecondary achievement between Mexican Americans and Whites (Warren 1996), total number of years completed among the Filipinos and Cubans and lower university enrolment among Blacks, Cambodians and Mexicans (Rumbaut 2005). Immigration scholars also provide evidence that a bilingual background may provide immigrant children with the resources necessary to succeed in the educational system because it provides them with greater access to community networks and encourages effective communication with their parents (Glick and White 2003, White and Glick 2000).

Parental human capital, however, may not be enough to explain the resiliency of some ethnic effects—in particular, the educational advantage among some groups—suggesting that social capital in the family and the immigrant community also plays a salient role in accounting for these group differences. Coleman (1990) emphasizes the significance of intergenerational closure in tightly knit communities, where parents get to know other parents and children and share similar values, obligations and social supports that facilitate supervision and provide aspirations for young immigrants. The advantages among Asian Americans in the educational system have been attributed to a variety of social capital factors. For example, supplementary education and language schools, especially for the Chinese and Koreans, provide academic enrichment, teaching of family values and a place where co-ethnic ties are rebuilt, and where immigrants with varying levels of socioeconomic background come together (Zhou and Kim 2006). Parents who watch over other children in their own communities can be effective in discouraging delinquent behaviour among Vietnamese children (Zhou and Bankston 1998). Intact families also provide a tighter monitoring of children's activities, and strong family ties have been linked to academic achievement among Hispanics, despite coming from a disadvantaged socioeconomic status parental background (Valenzuela and Dornbusch 1994). As Zhou (1997) contends, the greater the involvement to one's community, and the tighter the ethnic community, the greater the conformity to the group's expectations, which in turn can help immigrants and their children overcome their structural disadvantages.

Ethnic solidarity, however, may not be sufficient to overcome the struggles of some immigrants. Beyond the human and social capital factors lie the different modes of incorporation of immigrant communities. These community differences are expected to have lasting effects on the integration of the children of immigrants (Portes and MacLeod 1999). Entrapment into the bottom of the economic stratum, noted among Mexican immigrants and other less skilled newcomers in the United States, imposes barriers for socioeconomic mobility among their offspring (Perlmann and Waldinger 1997). Discrimination encountered during childhood also creates difficulties for the second generation as they navigate through the educational system. These collective experiences facilitate a defeatist attitude, providing a reason to withdraw from

academic activities (Ogbu 1991). The experiences of African Americans with various forms of racism in mainstream institutions, including the educational system and the labour market, may provide a frame of reference for the children of immigrants to adopt a set of oppositional behaviours, further contributing to their path toward downward assimilation (Portes and Zhou 1993).

On the other hand, a minority's marginal status may heighten their youth's achievement orientations (Boyd and Grieco 1998). Researchers have linked the marginal status of Asian Americans in non-educational arenas, such as politics, sports and entertainment, as blocked opportunities that provide a reason to avert their disadvantages, by pursuing careers—for example, science and engineering—that are highly dependent on educational qualifications (Xie and Goyette 2003, Sue and Okazaki 1990).

These modes of incorporation indeed reflect the varying contexts of reception of the host society, and, for Canadian immigrants, these community differences are also expected to transcend individual and family characteristics (Portes and Rumbaut 1996). While some patterns may show similar trends to those of the United States—for example, the educational advantage of Asian groups—two caveats that bear on the ethnic inequality in the educational attainment of Canadian immigrants should be noted.

First, access to postsecondary education is more equitable in Canada than in the United States, in a sense that Canadian students in the bottom and the second income quartiles are equally likely to attend university (Frenette 2005). This gap is more pronounced among American students in the bottom income quartile with only 15%, but more than two times (32%) in the second income quartile enrolled in university. Differences are also more apparent for those at the top income quartile, with 63% of American students enrolled in university compared with 46% of Canadian students (Frenette 2005). While these observed differences indicate that university education is more equitable in Canada, at least for those from modest- and low-income families, we cannot ignore the different educational outcomes that may be observed among different immigrant communities.

The unique settlement experiences of various immigrant groups also provide insights into the divergent educational outcomes among the children of immigrants. The earlier wave of European immigrants to Canada, who were admitted mainly on the basis of national origin, settled largely in rural areas and generally had lower levels of education than immigrants who came since the 1970s and who were largely urban. The lower educational levels for these former groups also occurred at a time of numerous blue-collar jobs that did not require postsecondary credentials (Davies and Guppy 1998). These groups, who initially faced disadvantages in the labour market because of lower levels of education, have improved their earnings and occupational status (Hou and Balakrishnan 1996, Richmond 1990). Despite lower parental educational levels the assimilation of these groups provides an opportunity for advancement among the subsequent generation.

Immigrants faced with the points-system admissions criteria still encounter barriers, regardless of higher levels of educational attainment, with studies showing a significant disadvantage in the labour market especially for domestic and foreign-born Black males (Hum and Simpson 2000). Also, the immigrant women who arrived since the late 1970s under the Foreign Domestic Movement Program or Live-in Caregiver Program, as it is known now—notably from the

Caribbean and the Philippines—also face wage disadvantages and devaluation of foreign credentials, situating them near the bottom of the economic strata at the time of arrival (Kelly 2006, Simmons 1998).¹ For visible minorities, especially for Blacks, the lower rate of return to schooling may hinder the progress of the children of immigrants.

Policies that focus on immigrants' human capital and that allowed for the admission of entrepreneurs, the self-employed and investors—specifically under the Business Immigration Program²—contributed to a large influx of affluent and/or highly educated immigrants, particularly from Hong Kong, China and India. The growth of immigrant enterprises and ethnic businesses, not only in Toronto and Vancouver but also in smaller urban areas, provide a site for the formation of social capital that Asians can turn to for support and social mobility (Li 2003). Hence, the children of these immigrants can benefit from the strength of these community resources and their family advantages, increasing their chances of success in the educational system (Portes and MacLeod 1999). These varying modes of reception raise the issue of whether stratification in educational attainment based on class and gender will be increasingly compounded by differences in ethnicity.

We examine the extent to which parental human capital, as measured by parental education and father's generation average educational level and income, mitigate the group differences in university educational attainment among children of immigrant parents. We hypothesize that groups with lower levels of education will mainly be accounted for by their parents' levels of education. Our data do contain sufficient measures to allow us to fully investigate the role played by social capital, ethnic community resources, and other potentially important factors.

In this study, we treat father's generation average educational level and income as a unique form of group-level human capital. Children's educational attainment does not depend entirely on their own parents' human capital but also on the average skills in the previous generation of the ethnic group (Borjas 1995). The main premise is that the immigrant group acts as an externality in the human-capital accumulation process. The average skill level of the immigrant group in the father's generation is critical in intergenerational mobility, and these differences in the levels of group human capital may retard the convergence of the average skills of ethnic groups across generations (Borjas 1994, 1992). Our study examines the impact of group-level human capital, as measured by the average percentage completing university degrees and the mean earnings for the father's generation, i.e., male immigrants aged 35 to 50 by country of birth from the 1991 Census.

We also examine the importance of the urban/rural residence of the father's generation. Rural and small town residence is associated with low levels of finishing university, because of difficulties of access to universities (Frenette 2004) and the lower demand for highly educated workers in rural areas (Bollman 1999). Some European-origin groups are highly concentrated in

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1. The Foreign Domestic Movement Program was implemented in 1980 and replaced with the Live-in Caregiver Program in 1992. Work visas were issued under the conditions that caregivers were to reside in their employers' homes. Canada allows caregivers to apply for immigrant status after two years, provided that they have shown evidence of having developed language skills and employment credentials (Simmons 1998).
 2. The Business Immigration Program allowed the admission of entrepreneurs who are required the establishment or purchase of a business in Canada intended to provide employment to Canadian citizens or permanent residents. In the mid-1980s the inclusion of the investor category required a net worth of at least \$500,000 and to incur a business investment worth at least \$250,000 (Li 2003).

rural areas and small towns, and the difference in residential locations among the parents' generation may affect group differences in educational attainment.

3 Data and methods

This study is based on the Statistics Canada 2002 Ethnic Diversity Survey (EDS). The EDS is a national survey of over 42,000 non-Aboriginal Canadian residents aged 15 years or over. The survey was designed to provide information on how Canadians of different ethnic backgrounds interpret and report their ethnicity and how people's backgrounds affect their participation in the social, economic and cultural life in Canada. For these purposes, the EDS covers a wide range of topics, including ethnic ancestry, ethnic identity, place of birth, visible minority status, religion, religious participation, knowledge of languages, family background, social networks, civic participation, interaction with society, attitudes, satisfaction with life, trust and socioeconomic activities. The survey also over-samples non-British/French minority groups and thus obtains relatively large samples to allow comparisons between these minority groups and more established, large ethnic communities in various characteristics.

This study focuses on group differences in obtaining university degrees among the second generation, including Canadian-born children of at least one immigrant parent and those who immigrated to Canada at age 12 or younger. We also include children of Canadian-born parents as the comparison group. Since young adults are more likely to finish university than older people, and ethnic groups differ significantly in age structures, we limit our analysis to a sub-sample of about 6,019 young adults aged from 25 to 34. In our study sample of children of immigrant parents (3,330), about 16% are child immigrants who immigrated to Canada in the 1970s and 1980s. The other 84% were born in Canada to parents who immigrated to Canada before the 1970s. The sample size of children of Canadian-born parents is 2,689.

Within the selected sample, we identify the following 18 source country/region groups among children of immigrant parents, each with a minimum sample size of about 50 persons. The grouping is based on individuals' country of birth for foreign-born youth, mothers' country of birth for Canadian-born youth if the mother was an immigrant, or fathers' country of birth if only the father was an immigrant. These source-region groups include eight non-Western countries/regions: Africa, the Caribbean, Latin America, China (including Hong Kong and Taiwan), the Philippines, India, West Asia/Middle East, and other Asia.

There are also 10 groups from the Western countries: the United States, the United Kingdom, Germany, Italy, Portugal, the Netherlands, other Northern/Western Europe, Eastern Europe, other Europe, other countries (mostly Oceania). See Table 1 for sample size for each identified group. Of these groups, the population composition is much more heterogeneous among some than among others. For instance, about 14% of the African immigrant group reported themselves as Blacks in response to the survey question on visible minority status, 37% reported themselves as other visible minorities, and 49% reported that they had European ethnic origins. About 62% of Caribbean immigrants reported themselves as Blacks and 23% as other visible minorities. By comparison, 96% of the immigrants from China reported themselves as Chinese in response to the survey question on visible minority status, 95% of the immigrants from India reported being South Asians and 84% of the immigrant from the Philippines reported being Filipinos.

In our regression analyses, we include five sets of explanatory variables. The first set is basic demographic variables, including age (ranging from 25 to 34), sex (female=1), family structure, place of residence and generation status. Family structure has four categories: lived mainly with biological parents until age 15, lived mainly with birth mother until age 15, lived mainly with birth father until age 15, and lived with neither birth mother nor birth father until age 15. The place of residence is coded as three categories: large metropolitan areas (the largest 8 metropolitan areas in Canada), small metropolitan areas (the other 18 metropolitan areas with a population of at least 100,000) and non-metropolitan areas. Generation status is coded as four categories: generation 1.5 (those whose age at immigration was from 6 to 12), generation 1.75 (those who immigrated before age 6), second generation (born in Canada with both parents who were immigrants) and generation 2.5 (born in Canada, but with only one immigrant parent). Previous U.S. studies have shown significant differences among these generational groups in adaptive outcomes (Rumbaut 2004).

The second set of variables measures father's and mother's education. For each parent, parental education is coded as four categories: with university degree, some postsecondary education, high school graduation and less than high school graduation.

The third set of variables captures the individual's mother tongue and family language environment and is coded as three categories: mother tongue is either English or French; mother tongue is neither English nor French, but spoke English or French with parents until age 15; and, mother tongue is neither English nor French, and did not speak English or French with parents until age 15.

The fourth set of variables captures what Borjas (1992, 1995) refers to as 'ethnic capital' which is essentially group-level human capital, as measured by the average socioeconomic resources among the generation of the respondents' parents. Following Borjas' approach, we derive the average percentage finishing university degrees and mean earnings for male immigrants, aged from 35 to 50, by country of birth from the 1991 Census. Then we merge these two variables with our EDS data by country of birth of respondents' fathers (or mothers if the father was not an immigrant) country of birth. In our EDS sample, we can identify 76 countries (or regions) of birth based on parents' information. We use this same 76-country grouping in deriving variables from the 1991 Census and in matching the two data sources. For children of Canadian-born parents, father's generation average percentage finishing university degrees and mean earnings were based on a 24-category grouping of ethnicity from the 1991 Census.

The final set of variables is the percentage living in rural areas or small towns (population less than 5,000) among the generation of the respondents' fathers. We follow the same approach used in deriving the above two group-level human capital variables. Since our group-level human capital variables and father's-generation residence are group-level variables, we allow within-group dependence in regression estimates.

We construct both logistic and Ordinary Least Squares (OLS) regression models in order to examine to what extent the above five sets of variables can account for the observed differences in university completion rates among immigrant groups.³ Based on OLS results, we also isolate the respective contribution of the above five sets of explanatory variables to each immigrant group's advantage or disadvantage in the outcome.⁴

We further examine how the effects of the five sets of variables differ across groups, by running models separately for European and non-European source country/region groups. Following this, we run separate models for the five large source countries/regions: the Caribbean, China, India, the United Kingdom and Italy.⁵

The EDS is a probabilistic survey, and a survey weight is assigned to each respondent to represent the target population at the national level. This weight is used in all our descriptive results. In our regression models, we standardize this survey weight by dividing it with the average weight among the selected immigrant groups in our study sample. This standardized weight has the advantage of maintaining the same distributions as those of non-standardized weights but of avoiding an overestimation of the critical level (Statistics Canada 2003).

4 Results

4.1 Descriptive results

4.1.1 Group differences in high school and university completion

The results in Table 1 show that the choice of indicators is crucial for studying educational attainment across immigrant groups. While groups differ significantly in their levels of finishing university, there is very little difference in high school completion. The proportion of high school graduates are about the same for all groups, with over 90% having completed high school; this indicates that assessment of educational attainment by high school completion does not reveal substantial group differences. Only by examining the university levels of education do we observe vast inter-group differences.

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3. Logistic regression is statistically more appropriate for the dichotomous outcome of whether someone finished university. However, Ordinary Least Squares (OLS) regression yields estimates very close to logistic regression results when the distribution of the outcome variable is in the 25%-to-75% range. As shown in the second and third columns of Table 4, the two approaches produce very similar results. The advantage of OLS regression is that it is straightforward to decompose the contribution of each explanatory variable to the 'explained' portion of each group's advantage or disadvantage, i.e., the difference in a group's university completion rate before and after controlling for all explanatory variables.
 4. This is done following one variation of the Oaxaca decomposition method (Oaxaca and Ransom 1994). In this approach, the 'explained' component is calculated as the sum of the differences between group means and the means of the pooled sample of all groups, with the differences weighted by the model coefficients of the pooled sample.
 5. Since the sample size was relatively small for individual groups and some variables have few cases in some categories, in running these group-specific models we re-code the family structure into two categories (lived with both birth parents versus others), and place of residence into two categories (large urban areas versus others). We also exclude the language variable from the models for immigrants from the Caribbean and the United Kingdom, since these groups have very few cases with mother tongue other than English or French.

Table 1
Educational attainment among children of immigrants,¹ aged from 25 to 34, by source country/region

	At least finishing high school	With university degree	Sample size
	percent		number
Africa	96.0	55.9 ***	132
Caribbean	96.6	26.3	273
Latin America	91.3	23.5	172
China	99.2	69.5 ***	177
Philippines	98.8	39.9	103
India	92.0	65.2 ***	131
West Asia/Middle East	87.8	44.3 *	79
Other Asia	90.7	52.2 ***	151
United States	94.4	33.8	207
United Kingdom	95.8	37.6 ***	523
Germany	93.0	24.0	215
Italy	93.1	32.2	315
Portugal	91.0	25.8	85
Netherlands	94.8	26.4	214
Other Northern/Western Europe	96.1	34.5	190
Eastern Europe	94.0	37.5 *	162
Other Europe	95.2	45.2 ***	145
Other countries	88.9	36.9	56
All groups of children of immigrants	94.3	37.6 ***	3,330
Children of Canadian-born parents	88.4	27.5	2,689

* $p < 0.01$ (level is significantly different from that among children of Canadian-born parents)

*** $p < 0.001$

1. Includes Canadian-born children with at least one immigrant parent and foreign-born children who immigrated to Canada before age 13.

Source: Statistics Canada, Ethnic Diversity Survey.

We observe wide differences in university completion rates among immigrant groups, with the most educated group—Chinese immigrant children at 69.5%—exceeding almost three times the rate of those near the bottom of the hierarchy—Latin American immigrant children at 23.5%. A striking pattern is noted among the Asian immigrant children, with the most highly educated groups by far being the Chinese, followed by Indians (65.2%), “other Asians” (52.2%), immigrant children from West Asian/Middle East (44.3%), and Filipino immigrant children (39.9%). Immigrant children from Africa also had a high university completion rate at 55.9%. As noted before, over 85% of the immigrants from Africa in our sample, most of who arrived in Canada before the 1980s, had European ethnic ancestry or belonged to visible minority groups other than Blacks. Immigrant children from the Caribbean (26.3%) and Latin America (23.5%) had the lowest levels among non-Western source regions.

For the identified Western source region groups, the highest levels of university completion are observed among “other Europe” (mostly South Europe excluding Italy and Portugal) (45.2%) and the United Kingdom (37.6%), with about one third observed among immigrant children from the United States and Italy. About one quarter of Dutch, Portuguese and German youth obtained a university degree.

Compared to children of Canadian-born parents, children of immigrant parents achieved a clear advantage with regard to university completion rates. Among immigrant groups, children whose parents were from Africa, China, India, West Asia/Middle East, United Kingdom, Eastern Europe, or “other Europe” had significantly higher rates of university completion than children of Canadian-born parents. Moreover, none of the children in the remaining groups had a university completion rate significantly lower than that among children of Canadian-born parents.

The results from the Ethnic Diversity Survey (EDS) should be interpreted with caution for three reasons. First, compared to the estimates from the 2001 and 2006 Census data, which are based on a much larger sample, and thus are more reliable (Table A.5), the EDS overestimates the level of university completion rate for both immigrant children and children of Canadian-born parents. This is particularly true for those from India, “other Europe” and Portugal. However, the census results show a similar pattern to that observed in the EDS for these group differences. Since census data do not contain information on most of our explanatory variables that are available in the EDS, in the following sections the analysis is only based on EDS. Second, the difference in the university completion rate between many groups of children of immigrants and children of Canadian-born parents is not statistically significant in the EDS data. This is mostly due to the small sample size of these groups. The difference in similar magnitude could be highly significant with the census data (Table A.5). Finally, the estimated university rates and group differences can change over a short period of time. As shown in Table A.5, while the rate among children of Canadian-born parents increased 2.4 percentage points from 2001 to 2006, it decreased among children whose parents were from the Philippines, West Asia/Middle East, and “other countries.” Over the five-year period from 2001 to 2006, the population size of youth (aged 25 to 34) of immigrant parents (about five times the sample size in Table A.5) increased 84% for those from West Asia/Middle East, and 30% to 64% for those from Africa, Latin America, China, the Philippines, India, and “other Asia”. The characteristics of some groups might also change significantly. Given the rapidly changing population size and composition among some national groups of children with immigrant parents, the results from the EDS should be treated as a snap-shot in a particular time period.

4.1.2 Group differences in family background and individual characteristics

Table 2 focuses on the group differences in the family background and individual characteristics: key factors expected to shape the educational attainments of the children of immigrants. The table shows large group differences in parental education. The most educated fathers are from the Philippines (42.7%), India (42.4%), the United States (37.9%), “other countries” (37.4%) and “other Asia” (34.1%), with over one third having obtained a university degree. The proportions of mothers who obtained a university degree are highest among immigrants from the Philippines (41.4%) and the United States, with over one third, followed by “other countries,” West Asia/Middle East, India and “other Europe,” with just less than one quarter having obtained a university degree. Less than 10% of immigrant fathers and mothers had a university degree among those from Italy and Portugal.

Table 2
Group differences in family background and individual characteristics

	Father with university education	Mother with university education	Living with both parents until age 15	Mother tongue not E/F, ¹ did not speak E/F with parents before age 15
	percent			
Africa	31.9	23.8	87.0	27.1
Caribbean	18.6	8.9	63.9	0.9
Latin America	19.1	12.1	88.9	42.8
China	25.2	14.8	98.1	64.3
Philippines	42.7	41.4	85.3	32.7
India	42.4	26.6	94.3	54.8
West Asia/Middle East	25.1	29.1	90.5	54.6
Other Asia	34.1	15.8	93.8	67.7
United States	37.9	33.3	68.7	0.9
United Kingdom	32.7	21.1	84.8	1.7
Germany	12.7	12.0	83.2	6.8
Italy	4.7	3.1	92.9	46.6
Portugal	4.4	6.8	89.0	71.6
Netherlands	22.3	10.7	87.6	4.3
Other Northern/Western Europe	24.1	19.3	79.3	7.4
Eastern Europe	27.9	25.4	85.6	38.2
Other Europe	17.6	9.3	92.6	52.3
Other countries	37.4	32.5	94.0	12.7
All groups of children of immigrants	24.0	16.9	86.0	27.5
Children of Canadian-born parents	15.4	14.7	78.3	0.2

1. English/French.

Source: Statistics Canada, Ethnic Diversity Survey.

The comparison of parental education and children's university attainment reveals a substantial across-generation improvement in university completion rates among children of immigrants. While on average 24% of immigrant fathers finished university education, 37.6% of their children aged 25 to 34 finished their university education. This across-generation improvement seems smaller than that among youth born to Canadian-born parents, i.e., the so-called third-plus generation. About 27.5% of youth aged 25 to 34 whose both parents were born in Canada finished their university education, compared with 15.4% among their fathers. This suggests that the advantage of the second-generation youth in educational attainment over the third-plus generation at least partially originated from the differences in educational attainments among their parents.

Among children of immigrants, there are large group differences in intergenerational mobility (see Charts 1-1 and 1-2). Immigrant children of most groups attain a higher percentage of university education than their parents, with three exceptions. Italian and Portuguese children surpassed their fathers' educational levels by a substantial margin. Some 32.2% of Italian second-generation youth have university degrees, compared with 4.7% among their immigrant fathers. Similarly, 25.8% of Portuguese youths completed university education, although only 4.4% of their immigrant parents did so. The intergenerational mobility among youth of immigrant parents from China, "other Europe," Germany, West Asia/Middle East and Africa is also notable, with close to or over twice as many youth completing a university education relative to their fathers' attainment. This upward pattern is not observed for immigrants from the United

States, the Philippines and “other countries” that are also the only groups in which youth, on average, do not attain a higher proportion of university degrees than their immigrant fathers.

Overall, the group difference in university completion rates is much smaller among children of immigrants than among their parents. This suggests that the Canadian education system tends to reduce the group difference in educational attainment among immigrant parents that was largely associated with the characteristics of immigrant flows from various source regions at different time periods. While groups whose parental educational levels were very low achieved a large intergenerational mobility, those who experienced little improvement across generations still maintained a level near or above the average.

Further differences in family background characteristics reveal the diversity among these groups. The highest proportions (over 90%) who lived in intact families are those from China, India, “other Asia,” Italy and “other Europe.” Overall, youth in the Caribbean group were more likely to grow up in single-parent households (36.1%) than any of the other groups.

Not everyone grew up speaking either English or French with their parents, and these group differences may be due to the varied language skills in the official languages of the parental generation (Zhou and Xiong 2005). About 71.6% of Portuguese youth grew up speaking only their native language with their parents, followed by those from “other Asia” (67.7%), China (64.3%), India (54.8%) and West Asia/Middle East (54.6%). A lower proportion of Filipinos (32.7%) spoke their native language while growing up, reflecting greater English proficiency for this group. In addition to immigrants from the United States and the United Kingdom, the groups who spoke mainly one of the official languages are those from the Caribbean (almost 100%), the Netherlands (95.7%) and Germany (93.2%).

Table 3 demonstrates considerable group differences in group-level human capital in terms of the average educational level and income and in urban/rural residences among the fathers’ generation, as explained in the Data and Methods section. Immigrant parents from the Philippines and the United States have the highest percentage finishing university education among the fathers’ generation (around 42%), while Portuguese (2.4%) and Italians (9.8%) have the lowest levels. There is also a large dispersion in log annual earnings of fathers’ generation across national origin groups, ranging from 10.37 for those from “other Asia” to 10.77 for those from the United Kingdom. This difference in log earnings is equivalent to about 40% difference in earnings. Compared with Canadian-born parents, most non-U.S./European immigrant parents had lower income even though some groups had much higher university completion rates than those of Canadian-born parents.

The father’s generation among most national origin groups predominantly resided in the urban areas, but one third of immigrant parents from the Netherlands and over one fifth of those from the United States, Germany and other Northern/Western Europe lived in rural areas. Over a quarter of Canadian-born fathers resided in rural areas.

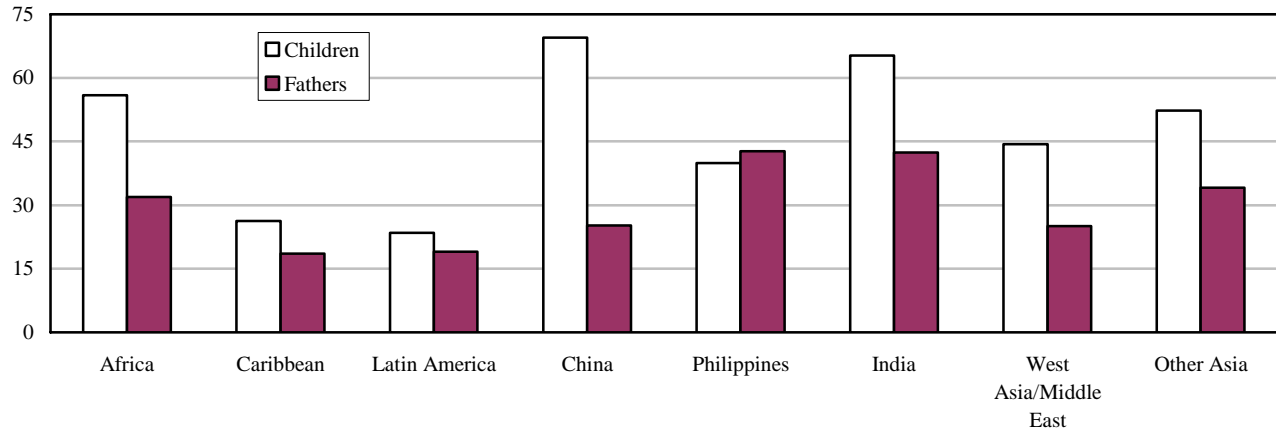
Table 3
Group differences in fathers' generation characteristics

	Fathers' generation with university education	Log average annual earnings of fathers' generation	Fathers' generation living in rural areas and small towns
	percent		percent
Africa	38.5	10.61	7.8
Caribbean	15.0	10.42	5.5
Latin America	17.1	10.38	12.9
China	30.1	10.46	4.2
Philippines	41.6	10.41	5.4
India	38.3	10.57	7.8
West Asia/Middle East	31.1	10.43	4.9
Other Asia	28.5	10.37	5.2
United States	41.5	10.71	24.5
United Kingdom	24.2	10.77	18.5
Germany	22.2	10.67	22.0
Italy	9.8	10.59	8.2
Portugal	2.4	10.40	7.2
Netherlands	17.9	10.68	37.7
Other Northern/Western Europe	24.3	10.69	20.5
Eastern Europe	27.4	10.59	10.4
Other Europe	11.8	10.48	8.8
Other countries	23.0	10.63	13.5
All groups of children of immigrants	22.6	10.59	14.0
Children of Canadian-born parents	19.9	10.68	26.1

Source: Statistics Canada, 1991 Census, 20% sample microdata.

Chart 1-1
Comparing children and fathers' educational attainment — Non-U.S./European source regions/countries

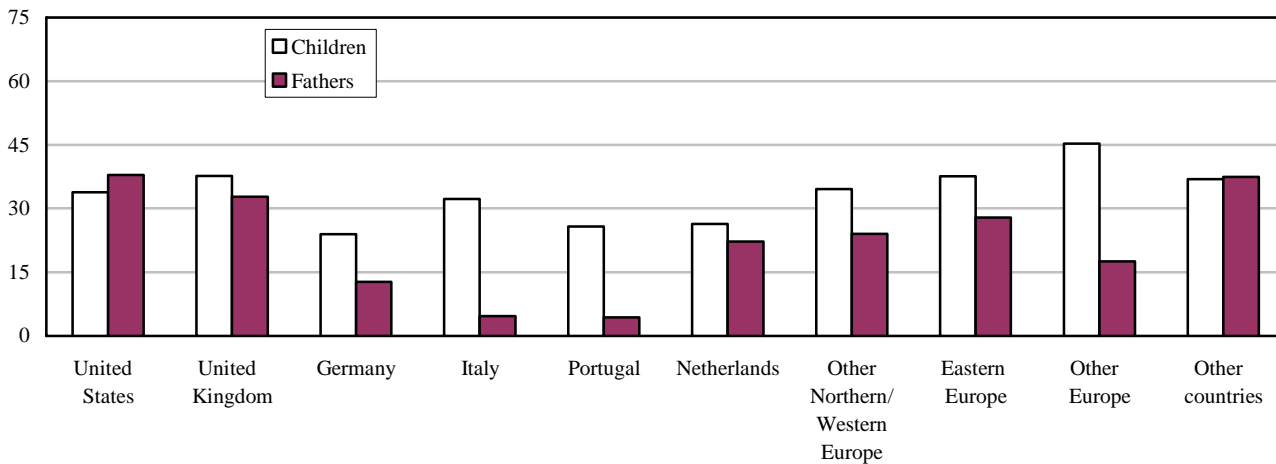
percentage with university degrees



Source: Statistics Canada, Ethnic Diversity Survey.

Chart 1-2
Comparing children and fathers' educational attainment — U.S./European source regions/countries

percentage with university degrees



Source: Statistics Canada, Ethnic Diversity Survey.

4.2 Multivariate analysis

4.2.1 Group differences in university completion

Table 4 shows the extent to which the selected five sets of explanatory variables account for group differences in university completion rates. The first column in Table 4 presents the observed university completion rates as in Table 1. The second and third columns present university completion rates estimated for the logistic regression model and Ordinary Least Squares (OLS) model, respectively, in Table A.1, by assuming each group has the same characteristics as the whole sample in the control variables included in the model. The logit and OLS estimates are almost identical. The fourth column is the difference between the observed (first column) and estimated (third column) university completion rates for each group. This difference shows the portion of a group's advantage or disadvantage that can be 'explained' by the control variables. The remaining (fifth to tenth) columns show the contribution from each set of control variables to the 'explained' portion (see Footnotes 4 and 5 for details).

Table 4
Observed and estimated percentages with university degrees by source country/region

	Observed	Logit estimates	Ordinary Least Squares estimates	'Explained' percentage points	Contributions to the 'explained' percentage points ¹					
					Basic demographics	Parental education	Language	Fathers' generation education	Fathers' generation income	Fathers' place of residence
	percent									
Africa	55.9	34.7	36.8	19.1	2.6	8.4	0.0	6.0	0.2	2.0
Caribbean	26.3	22.2	21.9	4.3	1.3	1.7	0.0	-1.9	1.0	2.3
Latin America	23.5	21.8	22.8	0.7	-0.3	-0.3	0.1	-1.2	1.2	1.3
China	69.5	57.6***	59.3***	10.2	2.9	0.7	0.2	3.2	0.8	2.4
Philippines	39.9	16.2**	12.3**	27.6	1.7	15.5	0.1	7.0	1.0	2.3
India	65.2	44.0***	45.7***	19.5	2.2	9.0	0.1	5.9	0.4	2.0
West Asia /Middle East	44.3	27.5	28.9	15.4	1.4	7.1	0.1	3.5	1.0	2.4
Other Asia	52.2	37.2	39.1	13.1	2.1	4.7	0.2	2.6	1.2	2.3
United States	33.8	20.3*	17.9*	16.0	-2.0	11.5	0.0	7.0	-0.2	-0.2
United Kingdom	37.6	28.0	27.6	10.1	0.5	8.4	0.0	1.2	-0.5	0.6
Germany	24.0	23.2***	22.3***	1.7	0.7	0.4	0.0	0.5	-0.1	0.1
Italy	32.2	40.2**	40.5**	-8.3	3.1	-10.1	0.1	-3.7	0.3	1.9
Portugal	25.8	38.4	38.8	-13.0	1.2	-11.4	0.2	-6.1	1.1	2.1
Netherlands	26.4	29.6	29.1	-2.7	-0.7	1.1	0.0	-0.9	-0.1	-2.0
Other Northern/Western Europe	34.5	27.5	27.6	7.0	0.9	4.7	0.0	1.2	-0.1	0.3
Eastern Europe	37.5	26.0	25.9	11.6	1.0	6.4	0.1	2.2	0.3	1.6
Other Europe	45.2	45.2**	46.7**	-1.4	1.9	-3.0	0.1	-3.0	0.7	1.8
Other countries	36.9	23.1	22.1	14.8	2.6	10.1	0.0	0.8	0.1	1.2
Children of Canadian-born parents	27.5	30.0	29.9	-2.4	-0.4	-1.0	0.0	-0.2	-0.1	-0.4

* p < 0.05 (level is significantly different from that among children of Canadian-born parents)

** p < 0.01

*** p < 0.001

1. Contributions to the explained percentage points may not total to explained percentage points because of rounding.

Source: Statistics Canada, Ethnic Diversity Survey.

When group differences in demographic factors, parental education, and group human capitals are accounted for, there are relatively little variations among European groups in university completion rates, with those from “other Europe,” and Italy having significantly higher rates, while those from the United States and Germany having significantly lower rates than children of Canadian-born parents (Table A.1). In comparison, the variations remain relatively large among non-Western groups. While immigrant youth whose parents are from China and India maintain their significant advantages in university completion rates over children of Canadian-born parents, when the selected sociodemographic and family background variables are accounted for, immigrant youth from the Philippines show disadvantages relative to children of Canadian-born parents (Table A.1 and the third column in Table 4).

Comparing the fourth with the first column in Table 4 shows that differences in demographic factors, parental education, and group human capital account for part of the advantages in university completion rates among some Asian groups. With the average characteristics as the whole sample and assuming the control variables had same effects on the outcome across all groups, the university completion rates would reduce by 69% for children of immigrants from the Philippines, 34% for those from Africa, 30% for those from India, about 35% for those from West Asia/Middle East, and 15% for Chinese immigrants. The results in the fifth to tenth columns suggest that youth of Asian immigrant parents generally benefit from the fact that their fathers’ generation tends to be concentrated in metropolitan areas, and high levels of parental education (except Chinese immigrants), and high average educational levels in their fathers’ generation. Controlling for demographic factors, parental education, and group human capital had little impact on the university completion rate among Caribbean and Latin American youth, but it tends to lessen the advantage of youth of parents from Africa.

Group differences in demographic factors, parental education, and group human capital also account for a large part of the disadvantages in university completion rates among some European groups. With the average characteristics as the whole sample, the university completion rates would increase for the following national origin groups: 50% for Portugal, 10% for the Netherlands, and 26% for Italy.. Low levels of parental education and average educational levels among the father’s generation are the most important variables contributing to the relatively low university-completion rates among the Portuguese.

4.2.2 Group differences in the effects of major explanatory variables

For all groups as a whole, we observe that women tend to have higher university completion rates than men (Table A.1). Youth who did not live with parents, or lived with a lone mother by age 15, have lower university completion rates than those who mainly lived with two biological parents. Youth who lived in large metropolitan areas have higher university completion rates than those who lived in rural areas or small towns. Both mothers’ and fathers’ educational levels significantly predict youth’s university-completion rates.

The effects of mother tongue and family language environment are not statistically significant (Table A.1). This is understandable, since children of immigrants in our study sample finished all their formal education within the Canadian educational system, and should not have had difficulties with the host-country language. It should be noted that many immigrants who came to Canada since the 1970s spoke neither English nor French. Although the language difficulty may

affect these immigrants' economic performance, the non-English/French family environment had no direct impact on their children's university educational attainment.

Table 5 summarizes group differences in the effects of the major explanatory variables based on separate analysis for non-Western and Western source region groups in Tables A.2 and A.3. Table A.2 shows models separately for non-Western and Western source region groups as well as for children of Canadian-born parents while Table A.3 presents each model separately for five large source region/country groups—China, India, the Caribbean, the United Kingdom and Italy. This allows us to determine the extent to which the predictors are more important for some national origin groups and not for others. In order to show whether the different effects of some explanatory variables across groups are statistically significant, Table A.4 provides the T values for the difference in model parameters for different groups.

As Table 5 shows, males of Caribbean origin are less likely to attain a university degree than their female counterparts. The female advantage is also noted for the Chinese and the Italians, with a 7- to 15-percentage-point difference with their male counterparts. The reverse is observed among those from India (not statistically significant), where 67.0% of males versus 63.5% of females are predicted to obtain a university degree.

The influence of the father's education matters more for Western country origin groups than for youth with non-Western origins. The greatest predicted percentage difference was observed among the Italians, with 30.2% obtaining a university degree for those whose fathers have less than a high school education. This rises to 70.2% for those whose fathers have a university education. Father's university education also makes a large difference for youth of immigrant parents from India, the Caribbean and the United Kingdom. Regardless of whether Chinese fathers only had a high school or a university education, there was little difference in the percentage of those who obtained a degree—69.3% and 77.3%, respectively. Mothers' education makes a large difference for university attainment among youth of immigrant parents from the United Kingdom, and to a lesser extent, from China. The effect of mothers' education is not significant or consistent for youth of immigrant parents from the Caribbean, India and Italy.

Family language environment shows different effects for the non-Western and Western origin groups, with minority-language retention showing to be not beneficial for Western origin groups. Almost 73% of the Chinese youth who retained their native language during childhood attained a university degree in comparison with 55% of those who spoke only either English or French with their parents. This pattern also holds for youth of immigrant parents from India.

Table 5
Group differences in the effects of some explanatory variables

	Predicted percentage with university degrees							
	Children of Canadian-born parents	Non-U.S./ European countries	China	India	Caribbean	United States and Europe	United Kingdom	Italy
	percent							
Gender								
Female	30.6	51.3	78.2	63.5	33.2	33.6	36.4	35.3
Male	24.5	35.7	62.9	67.0	17.8	29.6	38.6	28.3
Father's education								
With university degree	51.8	61.6	77.3	87.2	34.4	55.8	51.6	70.2
Less than high school graduation	18.9	33.5	69.3	46.6	15.8	19.9	22.0	30.2
Mother's education								
With university degree	51.7	45.3	82.5	69.6	36.9	42.3	57.8	19.2
Less than high school graduation	17.2	38.4	59.2	56.2	27.7	24.6	24.6	31.0
Language								
Mother tongue is E/F ¹	...	47.1	73.6	73.9	...	31.6	...	37.0
Mother tongue not E/F, speaking E/F with parents by age 15	...	34.7	54.8	47.1	...	41.7	...	33.9
Mother tongue not E/F, not speaking E/F with parents by age 15	...	41.7	72.6	65.0	...	29.2	...	37.0

... not applicable

1. English/French.

Note: The language variable is not used in the analysis for children of Canadian-born parents and children whose parents were immigrants from the Caribbean and the United Kingdom.

Source: Statistics Canada, Ethnic Diversity Survey.

5 Discussion and conclusion

This paper shows very large differences by national origin groups in university educational attainment among the children of immigrants. With similar individual and family characteristics, 59% of youth of immigrant parents from China are estimated to obtain a university degree, followed by those from India (46%), and from “other Europe” (47%). In contrast, 22% to 23% of youth of parents from the Caribbean and Latin America, and less than one fifth of youth of Filipino immigrants are estimated to obtain a university degree. As a benchmark, nearly one third of the children of Canadian-born parents completed university.

Among Western country origin groups, differences in university educational attainment are relatively small when group differences in family background are accounted for, with the exception of youth whose parents were from Germany. Parental education was important in explaining the relatively low university completion rates among the Portuguese.

Relative to the difference by gender and family income, the difference among youth of immigrant parents by national origin is much more salient. The gap in university completion rates between the most educated groups and lowest educated groups is in the range of 20 to 40 percentage points, when group differences in sociodemographic background are controlled for. In 2001, about 26% of women aged 25 to 34 who were Canadian-born, or immigrated to Canada at age 12 or younger, obtained university degrees. Their level was about 6 percentage points higher than their male counterparts (based on authors' estimates from the 2001 Canadian Census). The postsecondary participation gap between students with family income less than \$25,000 and those whose family incomes were up to \$100,000 was less than 20 percentage points in the late 1990s (Corak, Lipps and Zhao 2003).

Appendix

Table A.1
Logistic regression and Ordinary Least Squares models predicting with university degree

	Logistic regression		Ordinary Least Squares model	
	Coefficient	Standard error	Coefficient	Standard error
Intercept	-1.12	6.56	0.26	0.26
Africa	0.27	0.45	0.07	0.09
Caribbean	-0.51	0.32	-0.08	0.06
Latin America	-0.55	0.47	-0.07	0.07
China	1.47***	0.23	0.29***	0.04
Philippines	-1.00**	0.35	-0.18**	0.06
India	0.78***	0.21	0.16***	0.04
West Asia/Middle East	-0.15	0.35	-0.01	0.07
Other Asia	0.41	0.45	0.09	0.09
United States	-0.66*	0.31	-0.12*	0.06
United Kingdom	-0.13	0.13	-0.02	0.02
Germany	-0.45***	0.11	-0.08***	0.02
Italy	0.58**	0.18	0.11**	0.03
Portugal	0.48	0.26	0.09	0.05
Netherlands	-0.03	0.22	-0.01	0.04
Other N.W. Europe	-0.16	0.16	-0.02	0.03
Eastern Europe	-0.25	0.29	-0.04	0.05
Other Europe	0.83***	0.25	0.17**	0.05
Other countries	-0.45	0.70	-0.08	0.13
Age	0.04***	0.01	0.007	0.002
Female	0.36***	0.09	0.06***	0.01
Not living with parents	-1.29*	0.50	-0.14***	0.03
Lone mother	-0.53***	0.06	-0.08***	0.01
Lone father	-0.57	0.31	-0.09	0.04
Large urban	0.84***	0.13	0.14***	0.02
Small urban	0.34*	0.16	0.05*	0.02
Generation 1.5	-0.36	0.27	-0.07	0.05
Generation 1.75	-0.14	0.20	-0.02	0.04
Generation 2	-0.26	0.13	-0.05*	0.02
Mother university	1.50***	0.22	0.28***	0.04
Mother some postsecondary	0.80***	0.11	0.12**	0.02
Mother high school graduation	0.52***	0.09	0.07**	0.02
Father university	1.58***	0.14	0.32***	0.03
Father some postsecondary	0.63***	0.16	0.10***	0.03
Father high school graduation	0.55*	0.25	0.08*	0.04
E/F ¹ is mother tongue	-0.05	0.20	0.00	0.04
E/F not mother tongue, speaking E/F with parents	-0.06	0.31	0.00	0.06
Father generation education	1.71	0.93	0.34	0.18
Father generation earnings	-0.25	0.63	-0.04	0.11
Proportion living in rural and small towns	-0.99	0.73	-0.13	0.12

* p < 0.05

** p < 0,01

*** p < 0.001

1. English/French

Source: Statistics Canada, Ethnic Diversity Survey.

Table A.2
Logistic models predicting with university degree by source country/region groups

	United States/Europe		Non-U.S./European countries		Children of Canadian-born parents	
	Coefficient	Standard error	Coefficient	Standard error	Coefficient	Standard error
Intercept	-5.18	8.73	-21.30***	7.49	18.94***	5.90
Africa	...	...	-1.16**	0.41	...	...
Caribbean	...	...	-1.97***	0.37	...	...
Latin America	...	...	-1.70***	0.31	...	...
Philippines	...	...	-1.68***	0.29	...	...
India	...	...	-0.53**	0.17	...	...
West Asia/Middle East	...	...	-1.15***	0.29	...	...
Other Asia	...	...	-0.77*	0.34	...	...
United States	-0.14	0.33	...	...	...	...
Germany	-0.23	0.15	...	...	...	...
Italy	0.42*	0.21	...	...	...	...
Portugal	0.49	0.32	...	...	...	...
Netherlands	0.40	0.27	...	...	...	...
Other N.W. Europe	0.06	0.19	...	...	...	...
Eastern Europe	-0.12	0.28	...	...	...	...
Other Europe	0.78***	0.29	...	...	...	...
Other countries	-0.26	0.64	...	...	...	...
Age	0.03	0.02	0.02	0.04	0.04***	0.01
Female	0.18	0.10	0.59**	0.19	0.39***	0.04
Not living with parents	-4.31***	1.15	-2.04*	1.02	-0.96***	0.27
Lone mother	-0.68***	0.19	-0.44	0.32	-0.52***	0.06
Lone father	0.29	0.53	-0.32	0.68	-0.76***	0.11
Large urban	0.60***	0.13	1.51***	0.39	0.88***	0.05
Small urban	0.17	0.18	1.27**	0.42	0.33***	0.06
Generation 1.5	-0.47	0.28	-0.19	0.58	...	...
Generation 1.75	-0.37*	0.18	0.39	0.43	...	...
Generation 2	-0.24	0.14	-0.17	0.37	...	...
Mother university	0.83*	0.32	0.05	0.33	1.88***	0.07
Mother some postsecondary	0.51**	0.19	0.32	0.34	0.97***	0.06
Mother high school graduation	0.38*	0.18	0.45	0.26	0.60***	0.06
Father university	1.64***	0.19	1.09***	0.30	1.67***	0.06
Father some postsecondary	0.81***	0.22	0.16	0.30	0.57***	0.06
Father high school graduation	0.40*	0.23	0.11	0.32	0.63***	0.06
E/F ¹ is mother tongue	0.03	0.21	0.23	0.22	...	...
E/F not mother tongue, speaks E/F with parents	0.51*	0.21	-0.29	0.39	...	...
Father's generation education	1.40	0.96	1.04	1.24	4.21***	1.12
Father's generation earnings	0.22	0.83	1.85*	0.76	-2.18***	0.55
Proportion living in rural and small towns	-2.87*	1.28	-3.68	2.32	-2.22**	0.77

... not applicable

* p < 0.05

** p < 0.01

*** p < 0.001

1. English/French

Note: China is the reference group for non-U.S./European groups and the United Kingdom is the reference group for European/ U.S. groups.

Source: Statistics Canada, Ethnic Diversity Survey.

Table A.3
Coefficients of logistic models predicting with university degree for major source countries/regions

	China	India	Caribbean	United Kingdom	Italy
Intercept	-2.09	3.30	-1.10	-4.10***	-2.22***
Age	0.01	-0.20**	0.00	0.04*	-0.01
Female	0.99*	-0.29**	0.83*	-0.15	0.47***
Lived with two parents		0.03	0.02	0.34*	1.25***
Large urban	0.09	1.09***	-0.80	0.62***	0.18***
Generation 1.5	4.75***	0.15	-0.04	-0.31	
Generation 1.75	2.62***	3.38***	-0.71	0.16	-0.80***
Generation 2	1.17***	0.43	-0.28	0.17	-0.38***
Mother university	1.01***	0.42	0.41	1.71***	-0.30***
Mother some postsecondary	1.01*	1.41***	-0.36	0.72*	0.75***
Mother high school graduation	0.85***	0.52***	-0.27	0.53	-0.14**
Father university	0.89***	3.13***	0.95	1.54***	1.94***
Father some postsecondary	-0.47***	0.11	1.33**	0.64**	-0.04
Father high school graduation	0.35***	0.74***	-0.71	0.97***	-0.01
E/F ¹ is mother tongue	0.00	0.60***			0.50***
E/F not mother tongue, speaks E/F with parents	-0.93**	-1.37***			0.40***
Sample size (number)	177	131	273	523	315

* p < 0.05

** p < 0.01

*** p < 0.001

1. English/French.

Notes: The coefficients for the language variables for the immigrants from the Caribbean and the United Kingdom are not included because very few in these groups had a mother tongue other than English or French. The "Lived with two parents" coefficient is not included for the Chinese group because few in this group did not live with both parents until age 15. "Generation 1.5" is combined with "Generation 1.75" for Italian immigrants due to the small sample size.

Source: Statistics Canada, Ethnic Diversity Survey.

Table A.4
T-values of testing statistical differences in regression coefficients for different groups in models in Table A.3

	India	Caribbean	United Kingdom	Italy
Female				
China	1.83	0.02	2.73 **	1.39
India		-1.88	-0.15	-1.08
Caribbean			3.00 **	1.50
United Kingdom				-2.31 **
Father's university education				
China	0.68	0.84	-0.42	1.94
India		0.08	-1.35	1.17
Caribbean			-1.78	1.24
United Kingdom				3.55 ***
Mother's university education				
China	-2.26 *	-0.48	-1.19	-1.54
India		2.09 *	1.84	1.15
Caribbean			-0.81	-1.27
United Kingdom				-0.81
E/F ¹ is mother tongue				
China	-0.86	...	...	-0.99
India		...	...	0.23
E/F not mother tongue, speaks				
E/F with parents				
China	0.69	...	...	-2.29 *
India		...	...	-2.30 *

... not applicable

* p < 0.05

** p < 0.01

*** p < 0.001

1. English/French.

Note: Some cells have been left blank to avoid repetition.

Source: Statistics Canada, Ethnic Diversity Survey.

Table A.5
University Educational Attainment among children of immigrants,¹ aged from 25 to 34,
by source country/region, Canada, 2001 and 2006

	2001			2006		
	With university degrees	Ratio to the level among children of Canadian-born parents	Sample size	With university degrees	Ratio to the level among children of Canadian-born parents	Sample size
	percent		number	percent		number
Africa	48.3***	2.3	4,076	50.1***	2.1	5,518
Caribbean	26.0***	1.2	8,237	27.8***	1.2	10,572
Latin America	22.3	1.0	5,947	23.3	1.0	9,405
China	56.7***	2.6	6,223	62.4***	2.6	9,087
Philippines	35.1***	1.6	2,827	33.0***	1.4	4,649
India	46.6***	2.2	4,443	50.1***	2.1	6,864
West Asia/Middle East	42.0***	2.0	2,743	41.1***	1.7	5,049
Other Asia	43.4***	2.0	6,220	44.8***	1.9	9,764
United States	31.6***	1.5	9,906	35.1***	1.5	9,801
United Kingdom	29.4***	1.4	31,375	33.3***	1.4	27,194
Germany	28.5***	1.3	9,930	33.0***	1.4	8,097
Italy	28.0***	1.3	22,935	31.4***	1.3	18,722
Portugal	14.6***	0.7	6,782	17.5***	0.7	7,796
Netherlands	24.2***	1.1	10,360	30.0***	1.3	8,100
Other Northern/Western Europe	31.4***	1.5	10,090	36.8***	1.5	8,641
Eastern Europe	37.6***	1.8	9,015	41.4***	1.7	8,858
Other Europe	32.3***	1.5	10,985	34.5***	1.5	9,872
Other countries	33.8***	1.6	1,708	33.0***	1.4	1,849
All groups of children of immigrant parents	31.6***	1.5	163,802	35.8***	1.5	169,838
Children of Canadian- born parents	21.4	1.0	441,533	23.8	1.0	433,788

*** p < 0.001 (level is significantly different from that among children of Canadian-born parents)

1. Includes Canadian-born children with at least one immigrant parent and foreign-born children who immigrated to Canada before age 13.

Source: Statistics Canada, 2001 and 2006 Censuses of Population, 20% sample microdata files.

References

- Ansalone, George. 2001. "Schooling tracking, and inequality." *Journal of Children & Poverty*. 7, 1: 33–47.
- Aydemir, Abdurrahman, and Mikal Skuterud. 2004. *Explaining the Deteriorating Entry Earnings of Canada's Immigrant Cohorts: 1966–2000*. Analytical Studies Branch Research Paper Series. Catalogue no. 11F0019MIE2004225. Ottawa: Statistics Canada.
- Baker, Michael, and Dwayne Benjamin. 1994. "The performance of immigrants in the Canadian labor market." *Journal of Labor Economics*. 12, 3: 369–405.
- Bollman, Ray D. 1999. *Human Capital and Rural Development: What Are the Linkages?* Agriculture and Rural Working Paper Series. Catalogue no. 21-601-MIE1999039. Ottawa: Statistics Canada.
- Borjas, George J. 1995. "Ethnicity, neighborhoods, and human-capital externalities." *American Economic Review*. 85, 3: 365–390.
- Borjas, George J. 1994. "Long-run convergence of ethnic skill differentials: the children and grandchildren of the great migration." *Industrial and Labor Relations Review*. 47, 4: 553–573.
- Borjas, George J. 1992. "Ethnic capital and intergenerational mobility." *Quarterly Journal of Economics*. 107, 1: 123–150.
- Boyd, Monica. 2002. "Educational attainments of immigrant offspring: Success or segmented assimilation?" *International Migration Review*. 36, 4: 1037–1060.
- Boyd, Monica, and Elizabeth M. Grieco. 1998. "Triumphant transitions: Socioeconomic achievements of the second generation in Canada." *International Migration Review*. 32, 4: 853–876.
- Caplan, Nathan, Marcella H. Choy and John K. Whitmore. 1991. *Children of the Boat People: A Study of Educational Success*. Ann Arbor: University of Michigan Press.
- Coleman, James S. 1990. *Foundations of Social Theory*. Cambridge, Mass.: Belknap Press of Harvard University Press.
- Corak, Miles. 2001. *Are the Kids All Right? Intergenerational Mobility and Child Well-being in Canada*. Analytical Studies Branch Research Paper Series. Catalogue no. 11F0019MIE2001171. Ottawa: Statistics Canada.
- Corak, Miles, Garth Lipps and John Zhao. 2003. *Family Income and Participation in Post-Secondary Education*. Analytical Studies Branch Research Paper Series. Catalogue no. 11F0019MIE2003210. Ottawa: Statistics Canada.

- Davies, Scott, and Neil Guppy. 2006. *The Schooled Society: An Introduction to the Sociology of Education*. Don Mills, Ont.: Oxford University Press.
- Davies, Scott, and Neil Guppy. 1998. "Race and Canadian education." In *Racism and Social Inequality in Canada: Concepts, Controversies and Strategies of Resistance*. 131–156. Vic Satzewich (ed.). Toronto: Thompson Educational Publishing.
- Duncan, Greg J. 1994. "Families and neighbors as sources of disadvantage in the schooling decisions of white and black adolescents." *American Journal of Education*. 103, 1: 20–53.
- Frenette, Marc. 2005. *Is Post-secondary Access More Equitable in Canada or the United States?* Analytical Studies Branch Research Paper Series. Catalogue no. 11F0019MIE2005244. Ottawa: Statistics Canada.
- Frenette, Marc. 2004. "Access to college and university: Does distance to school matter?" *Canadian Public Policy*. 30, 4: 427–443.
- Fulgini, Andrew J., Vivian Tseng and May Lam. 1999. "Attitudes toward family obligations among American adolescents with Asian, Latin American, and European backgrounds." *Child Development*. 70, 4: 1030–1044.
- Glick, Jennifer E., and Michael J. White. 2003. "The academic trajectories of immigrant youths: Analysis within and across cohorts." *Demography*. 40, 4: 759–783.
- Guppy, Neil, and Scott Davies. 1998. *Education in Canada: Recent Trends and Future Challenges*. 1991 Census Monograph Series. Catalogue no. 96-321-MPE1998003. Ottawa: Statistics Canada; Minister of Industry.
- Heckman, James J. 2000. "Policies to foster human capital." *Research in Economics*. 54, 1: 3–56.
- Hirschman, Charles. 2001. "The educational enrollment of immigrant youth: a test of the segmented-assimilation hypothesis." *Demography*. 38, 3: 317–336.
- Hou, Feng, and T.R. Balakrishnan. 1996. "The integration of visible minorities in contemporary Canadian society." *Canadian Journal of Sociology*. 21, 3: 307–326.
- Hum, Derek, and Wayne Simpson. 2000. "Not all visible minorities face labour market discrimination." *Policy Options*. 21, 10: 45–48.
- Joseph, Alfred. 1998. "The impact of tracking: an examination of outcomes." *Journal of Poverty*. 2, 1: 1–22.
- Kao, Grace, and Jennifer S. Thompson. 2003. "Racial and ethnic stratification in educational achievement and attainment." *Annual Review of Sociology*. 29, 1: 417–442.

- Kelly, Philip F. 2006. *Filipinos in Canada: Economic Dimensions of Immigration and Settlement*. CERIS Working Paper no. 48. Toronto: Joint Centre of Excellence for Research on Immigration and Settlement.
- Li, Peter S. 2003. *Destination Canada: Immigration debates and issues*. Don Mills, Ont.: Oxford University Press.
- McLanahan, Sara, and Gary D. Sandefur. 1994. *Growing Up with a Single Parent: What Hurts, What Helps*. Cambridge, Mass.: Harvard University Press.
- Milan, Anne, and Kelly Tran. 2004. "Blacks in Canada: A long history." *Canadian Social Trends*. 72: 2–7. Catalogue no. 0040311-008-XIE. Ottawa: Statistics Canada.
- Miller, L. Scott. 1995. *An American Imperative: Accelerating Minority Educational Advancement*. New Haven: Yale University Press.
- Oakes, Jeannie. 1990. *Multiplying Inequalities: The Effects of Race, Social Class, and Tracking on Opportunities to Learn Mathematics and Science*. Santa Monica, Cal.: Rand.
- Oaxaca, Ronald L., and Michael R. Ransom. 1994. "On discrimination and the decomposition of wage differentials." *Journal of Econometrics*. 61, 1: 5–21.
- Ogbu, John U. 1991. "Immigrant and involuntary minorities in comparative perspective." In *Minority Status and Schooling: A Comparative Study of Immigrant and Involuntary Minorities*. 3–33. Margaret A. Gibson and John U. Ogbu (eds.). New York; London, U.K.: Garland.
- Perlmann, Joel, and Roger Waldinger. 1997. "Second generation decline? Children of immigrants, past and present—a reconsideration." *International Migration Review*. 31, 4: 893–922.
- Portes, Alejandro, Patricia Fernández-Kelly and William Haller. 2005. "Segmented assimilation on the ground: The new second generation in early adulthood." *Ethnic and Racial Studies*. 28, 6: 1000–1040.
- Portes, Alejandro, and Dag MacLeod. 1999. "Educating the second generation: Determinants of academic achievement among children of immigrants in the United States." *Journal of Ethnic and Migration Studies*. 25, 3: 373–396.
- Portes, Alejandro, and Dag MacLeod. 1996. "Educational progress of children of immigrants: The roles of class, ethnicity, and school context." *Sociology of Education*. 69, 4: 255–275.
- Portes, Alejandro, and Rubén G. Rumbaut. 2001. *Legacies: The Story of the Immigrant Second Generation*. Berkeley, Cal.: University of California Press; New York: Russell Sage Foundation.

- Portes, Alejandro, and Rubén G. Rumbaut. 1996. *Immigrant America: A Portrait*. 2nd Edition. Berkeley, Cal.: University of California Press.
- Portes, Alejandro, and Min Zhou. 1993. "The new second generation: Segmented assimilation and its variants." *Annals of the American Academy of Political and Social Sciences*. 530, Interminority Affairs in the U.S.: Pluralism at the Crossroads. 74–96.
- Reitz, Jeffrey G., and Sherrilyn M. Sklar. 1997. "Culture, race, and the economic assimilation of immigrants." *Sociological Forum*. 12, 2: 233–277.
- Renaud, V., and R. Costa. 1999. *1996 Census of Population: Certification Report, Population Group*. Housing, Family and Social Statistics Division. Ottawa: Statistics Canada.
- Richmond, Anthony H. 1990. "The income of Caribbean immigrants." In *Ethnic Demography: Canadian Immigrant, Racial and Cultural Variations*. 363–380. Shiva S. Halli, Frank Trovato and Leo Driedger (eds.). Ottawa: Carleton University Press.
- Rumbaut, Rubén G. 2005. "Turning points in the transition to adulthood: Determinants of educational attainment, incarceration, and early childbearing among children of immigrants." *Ethnic and Racial Studies*. 28, 6: 1041–1086.
- Rumbaut, Rubén G. 2004. "Ages, life stages, and generational cohorts: Decomposing the immigrant first and second generations in the United States." *International Migration Review*. 38, 3: 1160–1205.
- Rumberger, Russell W., and Katherine A. Larson. 1998. "Toward explaining differences in educational achievement among Mexican American language-minority students." *Sociology of Education*. 71, 1: 68–92.
- Silberman, Roxane, Richard Alba and Irène Fournier. 2007. "Segmented assimilation in France? Discrimination in the labour market against the second generation." *Ethnic and Racial Studies*. 30, 1: 1–27.
- Simmons, Alan. 1998. "Racism and immigration policy." In *Racism and Social Inequality in Canada: Concepts, Controversies and Strategies of Resistance*. 87–114. Vic Satzewich (ed.). Toronto: Thompson Educational Publishing.
- Simmons, Alan B., and Dwaine E. Plaza. 1998. "Breaking through the glass ceiling: the pursuit of university training among African-Caribbean migrants and their children in Toronto." *Canadian Ethnic Studies*. 30, 3: 99–120.
- Statistics Canada. 2005. *Population Projections of Visible Minority Groups, Canada, Provinces and Regions, 2001 to 2017*. Catalogue no. 91-541-XIE2005001. Ottawa: Statistics Canada.
- Statistics Canada. 2003. *Ethnic Diversity Survey: Portrait of a Multicultural Society*. Catalogue no. 89-593-XIE2003001. Ottawa: Statistics Canada.

- Stelcner, Morton. 2000. "Earnings differentials among ethnic groups in Canada: A review of the research." *Review of Social Economy*. 58, 3: 295–317.
- Sue, Stanley, and Sumie Okazaki. 1990. "Asian-American educational achievements: A phenomenon in search of an explanation." *American Psychologist*. 45, 8: 913–920.
- Sweetman, Arthur, and Gordon Dicks. 1999. "Education and ethnicity in Canada: An intergenerational perspective." *The Journal of Human Resources*. 34, 4: 668–696.
- Valenzuela, Angela, and Sanford M. Dornbusch. 1994. "Familism and social capital in the academic achievement of Mexican origin and Anglo adolescents." *Social Science Quarterly*. 75, 1: 18–36.
- Warren, John Robert. 1996. "Educational inequality among white and Mexican-origin adolescents in the American Southwest: 1990." *Sociology of Education*. 69, 2: 142–158.
- White, Michael J., and Jennifer E. Glick. 2000. "Generation status, social capital, and the routes out of high school." *Sociological Forum*. 15, 4: 671–691.
- Xie, Yu, and Kimberly Goyette. 2003. "Social mobility and the educational choices of Asian Americans." *Social Science Research*. 32, 3: 467–498.
- Zhou, Min. 1997. "Segmented assimilation: issues, controversies, and recent research on the new second generation." *International Migration Review*. 31, 4: 975–1008.
- Zhou, Min, and Carl L. Bankston. 1998. *Growing Up American: How Vietnamese Children Adapt to Life in the United States*. New York: Russell Sage Foundation.
- Zhou, Min, and Susan S. Kim. 2006. "Community forces, social capital, and educational achievement: The case of supplementary education in the Chinese and Korean immigrant communities." *Harvard Educational Review*. 76, 1: 1–29.
- Zhou, Min, and Yang Sao Xiong. 2005. "The multifaceted American experiences of the children of Asian immigrants: Lessons for segmented assimilation." *Ethnic and Racial Studies*. 28, 6: 1119–1152.