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**Preparing for Success in Canada and the United
States: the Determinants of Educational
Attainment Among the Children of Immigrants**

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Preparing for Success in Canada and the United States: The Determinants of Educational Attainment Among the Children of Immigrants

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Abstract

This paper reviews the recent research on the determinants of the educational attainment among the children of immigrants (the 2nd generation) in Canada and the United States. The focus is on the gap in educational attainment between the 2nd and 3rd-and-higher generations (the children of domestic born parents), as well as the intergenerational transmission of education between immigrants and their children.

On average, the children of immigrants have educational levels significantly above their counterparts with domestic born parents in Canada. In the U.S., educational levels are roughly the same between these two groups. In both countries, conditional on the educational attainment of the parents and location of residence, the children of immigrants outperform the 3rd-and-higher generation in educational attainment. Parental education and urban location are major determinants of the gap in educational attainment between the children of immigrants and those of Canadian or American born parents. However, even after accounting for these and other demographic background variables, much of the positive gap between the 2nd and 3rd-and-higher generations remains in Canada.

In Canada, parental education is less important as a determinant of educational attainment for the children in immigrant families than among those with Canadian-born parents. Less educated immigrant parents are more likely to see their children attain higher levels of education than are their Canadian-born counterparts.

Outcomes vary significantly by ethnic/source region group in both countries. In the U.S., some 2nd generation ethnic/source region groups, such as those with Mexican, Puerto Rican, Central American backgrounds, have relatively low levels of education, even though conditional on background characteristics they outperform their 3rd-and-higher generation counterparts. In contrast, in Canada, children of the larger and increasingly numerically important immigrant groups (the Chinese, South Asians, Africans, etc) register superior educational attainment levels to those of the 3rd-and-higher generation. This result is partly related to the high levels of parental education and group-level “ethnic capital” among these immigrant groups.

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Executive Summary

Many immigrant groups have a long tradition of turning to education as the mechanism best suited to promote success for their children. From the host countries perspective, the level of education achieved by the children of immigrants is one critical measure of the long-term, multi-generational integration of immigrants. As children of immigrants are a significant component of the total population in Canada and the US, it is important to know whether and why immigrant groups, and their children, are performing at levels above or below that of the native population, or of their parents.

This paper reviews existing research on the educational attainment achieved by the second generation (the children of immigrants) in Canada and the US, and its determinants. Relevant literatures from both sociology and economics are reviewed. Educational outcomes in Canada and the US are addressed separately, and from two perspectives. First, how does second generation educational attainment compare to that of the third-and-higher generations (i.e. the children of domestic-born parents), and what are the determinants of the educational attainment gap between these two groups. The second perspective is intergenerational. How are the children of immigrants doing compared to their parents?

On average, the children of immigrants have educational levels significantly above their counterparts with native born parents in Canada. In the U.S., educational levels are roughly the same between these two groups (unconditional comparisons). In both countries, conditional on the educational attainment of the parents and location of residence, the children of immigrants outperform the 3rd-and-higher generation in terms of educational attainment. Parental education and urban location are major determinants of the gap in educational attainment between the children of immigrants and those of Canadian or American born parents. However, even after accounting for these and other demographic background variables, much of the positive gap between the 2nd and 3rd-and-higher generations remains in Canada.

In Canada, parental education is less important as a determinant of educational attainment of the children in immigrant families than among those with Canadian-born parents. Less educated immigrant parents are more likely to see their children attain higher levels of education than are their Canadian-born counterparts. In the US, the extent to which the parents' advantage (or disadvantage) in educational attainment is passed on to their children appears to be about the same among immigrant as among American-born families.

Outcomes vary significantly by ethnic/source region group in both countries. In the U.S., some 2nd generation ethnic/source region groups, such as those with Mexican, Puerto Rican, Central American backgrounds, have relatively low levels of education, even though conditional on background characteristics they outperform their 3rd-and-higher generation counterparts. This result is in part related to the low levels of education among their immigrant parents. An increasing share of immigration since the 1980s has been from Central and South America, particularly Mexico. Hence, the (unconditional) educational attainment gap between the 2nd and 3rd-and-higher generation in the U.S. may turn negative in the future.

In contrast, in Canada, children of the larger and increasingly numerically important immigrant groups (the Chinese, South Asians, Africans, etc) register superior educational attainment levels to those of the 3rd plus generation. This result is partly related to the high levels of parental education and group-level "ethnic capital" among these immigrant groups. The educational attainment among entering immigrants has been rising since the 1980s in Canada. These trends may result in a growing positive (unconditional) educational attainment gap between the 2nd and 3rd-and-higher generations in Canada.

1 Introduction

Educational attainment is frequently viewed as the most important means of social mobility and labour market success. Many immigrant groups have a long tradition of turning to education as the mechanism best suited to promote success for their children. For many immigrants, this is an important factor in the selection of Canada or the US as a destination. And from the host countries perspective, the level of education achieved by the children is one important measure of the long-term, multi-generational integration of immigrants.

And the outcomes of the children of immigrants are important. In 2006 about 15% of the population of Canada were 2nd generation Canadians, as were 11% in the US. These numbers surpass those of any western nation except Australia. Furthermore, the determinants of the “gaps” in educational attainment between the children of immigrants and those of the native born (American or Canadian) provide an important measure of the long-term integration of immigrant families. Societies need to know why immigrant groups, and their children, are performing at levels above or below that of the native population, or of their parents.

Although both Canada and the US are major immigrant receiving countries, in recent decades, immigration patterns differed in important ways in the two countries, influencing outcomes for the second generation. Prior to the 1960s, both countries used country of origin as a primary determinant of immigrant selection, focusing on Western Europe. In the 1960s both countries altered their immigration policies, leading to what many researchers refer to as the “new” immigration.

Smith and Edmonston (1997) and Green and Green (2004) provide overviews of immigration history for the US and Canada respectively. There are four differences between Canada and the U.S. in the post 1960s “new” immigration that are important for second generation outcomes (Aydemir and Sweetman, 2008).

First, immigration rates have been higher in Canada than the US since the 1940s, and hence the 1st and 2nd generation populations are (relative to population size) more significant in Canada than the US. Second, the distribution of immigration by source regions developed very differently in the two countries. The US has always had a greater share of its immigration from Central and South America, as well as Mexico. As we will see, this is significant, since the 2nd generation outcomes for these groups are often inferior to those of other groups such as the Asians and Africans, to which Canada turned for much of its “new” immigration.

Thirdly, family reunification has been and remains the main immigrant selection program in the U.S. In addition to such a program, Canada also employs a “skilled immigrant class”, under which about one quarter of immigrants are selected directly, and another one-quarter indirectly (spouses and children). This program utilizes a points system which selects immigrants based on their educational attainment, language skills, occupation, and so on. The result has been that in general, immigrants to Canada are now more highly educated than those entering the US. Educational attainment of immigrants has increased over time in Canada, while remaining flat in the US. These trends influence educational attainment of the children of immigrants in the two countries. Finally, settlement policies may differ between the two countries, and could have a significant impact on second generation outcomes. Canada adopted a “multiculturalism” policy in the 1970s, which the US has not. This difference may result in a more welcoming environment in Canada to immigrants (and their children) from diverse cultures, but in reality the effect of this policy (if any) is difficult to judge.

This paper reviews existing research on the educational attainment achieved by the second generation in Canada and the US, and its determinants. Relevant literatures from both sociology and economics are reviewed. Educational outcomes in Canada and the US are addressed separately, and from two perspectives. First, how does second generation (the children of immigrants) educational attainment compare to that of the third plus generations (i.e. the children of native-born parents), and what are the determinants of the educational attainment gap between these two populations. Much of the available economics research in particular addresses this question. It focuses on outcomes at a point in time, asking why some groups are doing better than others. The second perspective is intergenerational. How are the children of immigrants doing compared to their parents? This requires a longer longitudinal perspective, often comparing the educational outcomes of the children (as adults) in the, say 2000s to those of their parents twenty five years or so earlier.

There is a significant American *sociological* literature on 2nd generation integration, focusing not only on educational outcomes, but on crime, family formation and other outcomes. Much of this work is driven by the “segmented assimilation” theory. It states that a variety of factors may lead to successful assimilation, but that they can also lead to poorer 2nd generation outcomes and “downward assimilation”. Determinants such as family socio-economic status, the immigrant family type (particularly single parents), the social context within which immigrants are received, discrimination, and potential involvement with drugs and gangs can play a major role, particularly in “downward” assimilation. The theory predicts very different outcomes for different ethnic groups in the US. This theory is discussed in Portes and Fernandez-Kelly (2008), Zhou (1997), Zhou et al. (2008), among many others, and is largely applicable to the US.

The *economics* literature turns to traditional determinants to explain the outcome gaps between the 1st, 2nd and 3rd-and-higher generations. These include immigrant parents’ education and income, location of residence (educational attainment is superior in large cities), source region or ethnicity, ethnic capital (the effect of characteristics of the ethnic group, independent of that of the family), parents expectations, and “visible minority (racial minority)” status, and at times, language spoken at home. Discrimination is rarely addressed directly in this literature.

The terms “visible minority¹” and “racial minority” are both used in this paper. In Canada, the term “visible minority” is widely employed in official government documents and in the research community. It refers to non-White population groups collectively. It is rarely used in other countries, where the term “racial minority” is more common. When referring to Canadian research, the term “visible minority” will be used, and elsewhere, racial minority.

2 Educational Outcomes among the Children of Immigrants in Canada

2.1 The Educational Attainment Gap Between the 2nd and 3rd-and-higher generations

Second generation Canadians register educational outcomes that are superior to the 3rd-and-higher generation. Numerous researchers, using different data and measures, have reached this conclusion. Boyd (2002) finds, for example, that no matter whether a

¹ The term visible minority applies to persons identified in the Employment Equity Act as being non-white in colour. However, Aboriginal people are not considered to be members of visible minority groups.

visible minority (i.e. non-White) or White, the second generation outperforms the 3rd-and-higher generation. In fact, educational attainment is highest among the visible minority 2nd generation (Table 1). Among the population aged 20 to 64, 24.1% of the 2nd generation visible minority group had a university degree in 1996, compared to 22.2% of the 2nd generation non-visible minorities, and 16.6% of the 3rd-and-higher generation.

Table 1
Education outcomes for the Canadian population, age 20 to 64, 1996

	Visible minority		Non-visible minority	
	3 rd -and-higher generation	2 nd generation	3 rd -and-higher generation	2 nd generation
% with university degree	16.60%	24.10%	16.60%	22.20%
Average years of education	13.1	14.8	13.2	14.0
Average years, age standardized	13.0	14.2	14.7	15.4
Fathers' education				
% with university degree	9.20%	25.20%	7.40%	10.80%
Average years of education	10.5	12.1	9.9	10.4
Average years, age standardized	10.9	11.7	12.2	12.5
Mothers' education				
% with university degree	3.90%	9.60%	4.10%	6.00%
Average years of education	10.8	11.2	10.1	10.3
Average years, age standardized	10.5	10.6	9.6	9.8

Source: Boyd (2002) with data from Survey of Labour and Income Dynamics.

Some of this difference may be due to the fact that the 2nd generation tends to be younger than the 3rd-and-higher generation, and more recent age cohorts tend to have higher levels of education. However, age standardized outcomes remained more or less unchanged; the children of immigrants having higher educational levels than the 3rd plus generation.

Aydemir and Sweetman (2008) came to a similar conclusion using 2001 Canadian census data. They observe that 37.8% of the 2nd generation had a bachelor or higher level degree in the census, compared to 31.8% of the 3rd-and-higher generation non-visible minority population.

Abada, Hou, and Ram (2008) turn to both the Canadian Ethnic Diversity Survey and the 2001 and 2006 Canadian censuses and find similar results. Hum and Simpson (2007), Aydemir, Chen, and Corak (2008) and Bonikowska (2008) also observe the higher educational attainment among the 2nd generation. Finnie and Mueller (2009), using Statistics Canada's Youth in Transition survey to focus on the related issue of the probability of attending college or university, find similar results. Second generation Canadians have a university participation rate of 54.3%, compared to 37.7% for the 3rd-and-higher generations.

Recent research has asked what drives the superior educational outcomes for 2nd generation Canadians. Boyd (2002) observed that the educational attainment of the parents of the 2nd generation was higher than that of the 3rd-and-higher generation; immigrants for many years have tended to have higher levels of education than the Canadian population. And not surprisingly, higher levels of parents' education are associated with higher attainment levels among the children, as is well known². However, even conditional on the educational

2. For example, if the father had a degree, the child had 1.5 more years of schooling compared to a father with high school graduation only, controlling for age, visible minority status, and gender. Location (large urban vs. rural) is not included. Unfortunately, in this and many other studies, in the

attainment of the parents (as well as age, and gender) the educational gaps persist: the 2nd generation visible minority population has about 1 year of education more than the 3rd-and-higher generation Whites. Hence, educational attainment of the parents, along with age and gender, accounted for less than half of the educational advantage of the 2nd generation visible minorities over the 3rd-and-higher generation Whites.

Bonikowska (2008) using Statistics Canada's Ethnic Diversity Survey, finds that controlling for both parents education and location of residence (immigrant families are more likely to live in urban areas where educational attainment is higher) tends to reduce the educational advantage of the 2nd generation over the 3rd-and-higher generation, but some of the gap remains.

Importantly, Bonikowska (2008) observes that the above average educational attainment of the second generation is driven largely by children from the less educated families. Put another way, children from immigrant families with, say, a university degree, do not attain higher levels of education than their counterparts from university educated families with Canadian-born parents (controlling for age and ethnic origin). However, children with less educated immigrant parents do outperform their counterparts with Canadian born parents. Having parents with lower levels of education is less of an impediment to educational outcomes for children of immigrants than for those of the Canadian born. For example, among the 3rd-and-higher generations, having a parent with a university degree results in 3.2 more years of schooling than does having a parent with less than high school. But among the 2nd generation, this difference is only 2.2 years. Hum and Simpson (2007) using different data, the Survey of Labour and Income Dynamics, came to a similar conclusion. They find that the effect of parent's education on the education of the children is weaker among families with immigrant rather than Canadian born parents.

This fits with observations by Aydemir, Chen and Corak (2008) on the intergenerational transmission of educational attainment. They conclude that the persistence in years of schooling across the generations is rather weak between immigrants and their Canadian-born children. It is only about one-third as strong as for the children of Canadian born parents. Although educational attainment of the parent is an important determinant of education outcomes of the children, it is less important among immigrant families than domestic families.

Turning to the role of family income as a determinant of children's educational attainment in immigrant families, Aydemir et al (2008) find that after controlling for the parents educational attainment, it is a weak predictor. This finding is consistent with results for the Canadian population as a whole³. Among immigrants this observation may also be in part related to the relatively poor economic outcomes among many highly educated immigrant families, particularly recent immigrants. Many lower income immigrant families have relatively high levels of education in Canada due to the poor economic outcomes of many of the highly educated first generation (see Picot 2008; Picot and Sweetman 2005; Reitz 2007 for reviews).

regression generational status is not interacted with parents' education, and hence these results are driven largely by the 3rd-and-higher generation, and this effect is assumed to be the same across all generations. The correlation between parents and childrens education is not known for the 2nd generation, and hence it is not known if it differs between the 2nd and 3rd-and-higher generations.

3. This finding also holds for the population as a whole (see Frenette 2005; Finnie et al. 2004). After controlling for educational attainment of parents, and other variables, family income is barely associated with, for instance, the likelihood of attending university in Canada. Furthermore, the unadjusted (raw) data suggest that access to post-secondary education is more equitable in Canada than in the US Children from bottom and second income quartiles are equally likely to attend university, and top quartile students twice as likely as those from the bottom quartile. In the US, second quartile students are twice as likely to attend, and top quartile children 4 times as likely as those from the bottom income quartile (Frenette 2005).

2.2 Ethnic group differences

The above results refer to the 2nd generation as a whole. But there is significant variation in outcomes by ethnic group/source country background. Ethnic group differences in parents' human capital and family socio-economic status will result in some inter-group differences in outcomes. But after accounting for such differences, ethnic group/source region background differences persist. These differences are only partially understood. The "ethnic capital" of the ethnic community--the overall educational attainment and income levels of the group, and group language schools and academic enrichment opportunities-- can enhance educational and other outcomes of the children of immigrants in that group (Borjas 2000; Zhou and Kim 2006). Differences among ethnic groups in these and other determinants (some unknown) can result in variation among groups in educational outcomes.

Abada, Hou and Ram (2008) found significant differences in educational attainment of the children of immigrants, depending upon the country from which the parents immigrated. University completion rates among 25 to 34 year olds varied from 62% among children from Chinese families, to 17% among those from Portuguese families. The children of Canadian born parents (3rd-and-higher generation) registered a completion rate of 23%. Only two of the eighteen 2nd generation groups had rates below that of the 3rd-and-higher generation (Table 2). Besides the Chinese, other 2nd generation groups with very high rates included children from Indian, African, West Asian/Middle East, and "other" Asian families.

Table 2
Percent of second generation with a university degree, population aged 25 to 34, by source region of immigrant parents

	percent		percent
Africa	50.1	Germany	33.0
Caribbean	27.8	Italy	31.4
Latin America	23.3	Portugal	17.4
China	62.4	Netherlands	30.0
Philippines	33.0	Other N./W. Europe	36.8
India	50.1	Eastern Europe	41.1
West Asia/Middle East	41.1	Other Europe	34.5
Other Asia	44.8	Other Countries	33.0
U.S.	35.1		
UK	33.3		
Children of Canadian born parents	23.8		

Source: Abada, Hou and Ram (2008) with data from Statistics Canada 2006 census

Abada et al asked to what extent five sets of explanatory variables – basic demographics (age, family type, and individuals place of residence), parents' education, individuals' mother tongue and family language environment, ethnic capital⁴, and parents' location of residence - accounted for the gap in the university completion rates between any particular 2nd generation ethnic group and the 3rd-and-higher generation. For most of the individual 2nd generation groups identified in table 2, the five groups of explanatory variables accounted for more than half of the (positive) gap between the 2nd and 3rd plus generation, and often all of it. The major exception was the children of Chinese immigrants, who registered the highest educational attainment gap. The five

4. Ethnic group's educational attainment and ethnic group's average family income.

groups of variables accounted for only one-quarter of the gap with the 3rd plus generation in their case. Other factors, not accounted for in the analysis, were driving the gap.

Some variables had more explanatory power than others. Overall, parental education accounted for more of the gap than any other group of variables, followed by the group “ethnic capital” and parents’ location of residence. Of the average gap of about 13 percentage points between the 2nd generation groups and the 3rd-and-higher generation, parental education accounted for about 6 percentage points, “ethnic capital” about 3.7 points, and location 1.6 points. Consistent with the earlier research that focused on the 2nd generation as a whole, this ethnic group based research suggests that parental education is a major determinant of educational outcomes (although less so than among Canadian-born families), and accounts for perhaps half of the 2nd and 3rd-and-higher generation gap.

But there was tremendous variation among ethnic groups regarding the extent to which any of these variables accounted for the gaps. In general, parental education accounted for more of the gap for groups from the developed western nations than for those from the Asian or African nations. Parental education seems to be a stronger predictor of children’s educational outcomes among immigrant families from the developed western nations (and families with Canadian-born parents). This may be related to the notion that among families with an Asian background, even children from less educated families are strongly encouraged to attend university.

But the results were very different when the focus was on the differences in children’s educational outcomes between source region groups themselves, rather than a comparison with the 3rd plus generation. Controlling for the five groups of variables did little to attenuate group differences. In the raw data the children’s university completion rates ranged from 25.8% to 69.5% among the 18 ethnic groups in the study. After assuming that all ethnic groups had the same characteristics (as defined by the five groups of variables mentioned above), the range was from 12.3% to 59.3%. There are determinants of the differences in ethnic groups beyond those captured by these five groups of variables, as much ethnic group difference remains.

Finnie and Mueller (2009) had perhaps the richest data set to address the issue of the gap in educational attainment between the 2nd and 3rd-and-higher generations. Using Statistics Canada’s longitudinal Youth in Transition Survey, their outcome variable was the probability of attending college or university during the 2000s among the 1st, 2nd and 3rd-and-higher generations. The probability of attending university was 16.6 percentage points higher among the 2nd than 3rd-and-higher generation. Basic controls reduced this gap to 12.9 pp, largely due to the effect of the urban/rural (location) variable. Family income increased the gap (immigrant families generally have lower incomes than their Canadian counterparts), and parental education reduced it somewhat, but only 2.6 pp. After accounting for these more or less standard variables, 11.4 pp of the original 16.6 pp gap remained. Accounting for differences in reading test scores and self-reported high school grades (children of immigrants tend to have higher grades than children of the Canadian born) reduced the gap by 2.1 pp⁵. This data set also has information on parental expectations, such as whether they expect their children to attend university. Controlling for group differences in this variable reduced the gap by 2.5 pp, a significant reduction.

5. This variable may well be endogenous, as noted by the authors (i.e. the desire to go to university drives marks higher).

Table 3
Gap between 2nd and 3rd-and-higher generation in probability of attending university

	Controls for					
	(1)	(2)	(3)	(4)	(5)	(6)
	No controls	Basic variables ¹	(2) + family income	(3) + parental education	(4) + grades and schools	(4) + parental expectation re: attending university
Overall						
Gap in percentage points	16.6	12.9	14	11.4	9.3	6.8
By country of origin (both parents from same origin)						
Americas	-2	-6.5	-4.9	-3	5.5*	-7.6*
Africa	44.7	39.6	39.7	36.2	25.6	25.5
China	43.8	38.3	40.3	39.9	30.7	31
Other east and S.E. Africa	19.6	15	19.7	19.5	16.6	11.5
Other Asia	29.9	26.4	30.3	25.3	14.2*	13.6*
West and N. Europe	19.2	17.2*	19.0*	8.8*	8.2*	7.4*
S. and E. Europe	5.5	0.0*	4.4*	9.1	6.1*	3.6*
Anglophones	4	0.0*	-2.7*	-3.9	-5.1*	4.9*

* Not significant

1. Basic variables include Urban/rural, province, whether linguistic minority, family type

Source: Finnie and Mueller (2009) with data from Statistics Canada's Longitudinal Youth in Transition Survey

2. "Anglophones" includes English speaking countries such as England, US, New Zealand, Australia, Ireland, etc.

Overall, a significant portion of the gap persists after accounting for these variables, including parent's education. These results were also produced by source region background (Table 3). Large gaps remain after controlling for the variables⁶.

But the results above relate largely to children of immigrants who arrived three to seven decades ago, since the research typically cover the population aged 25 to 64. Will the decline in earnings of successive cohorts of entering immigrant since 1980 negatively affect their children's educational outcomes? To produce some preliminary evidence, Bonikowska and Hou (2009) focus on the university attainment of the children of immigrants, but only those who arrive as immigrants themselves before age 12. This group of young immigrants is referred to as the 1.5 generation, and other research has shown that it often displays outcomes similar to that of the true 2nd generation.

The raw data suggest a large and increasing positive gap in the university completion rate between the 1.5 and the 3rd-and-higher generation as one moves from the 1960s to the 1980s cohorts. This increasing positive gap across years is driven primarily by the shift

6. These results suggest that the explanatory variables employed account for only part of the gap between the 2nd and the 3rd plus generation. But they do not mean, however, that these variables are not strong determinants of the likelihood of attending university (rather than the gap in this likelihood). For example, in the model with all controls except grades and expectations, a child whose parent has a BA is 28.4 pp more likely to attend university than someone with a high school educated parent. Even with grades and expectations included, this coefficient remains at 20.8 pp. Unfortunately, this model is estimated for the entire population, and typically in this type of analysis one is unable to determine if there is any difference, regarding the effect of parents' education⁶, between the 2nd and 3rd-and-higher generations.

towards increasing numbers of immigrants from the Asian countries; they tend to send their children to university at much higher rate than other groups, as noted above. Regarding the effect of the decline in family income between the 1960s and 1980s immigrant cohorts, this had only a very small (and at times statistically insignificant) effect on the educational attainment of the children of immigrants⁷. This result is consistent with the above mentioned evidence that suggests that family income has only a minor effect on the educational attainment of the children of immigrant families. The results also suggest that the deterioration in earnings among entering immigrants over the 1980s to early 2000s may have a small negative effect the educational outcomes of their children. But the educational attainment of immigrants to Canada rose dramatically in the 1990s, and this positive effect on their children's educational outcomes may more than offset any negative effect from declining family income.

2.3 Summary

The children of immigrants in Canada (2nd generation Canadians) have a significantly higher level of educational attainment than the children of Canadian-born parents (3rd-and-higher generations), based on unadjusted raw data. This higher level of achievement is most noticeable among the visible minority 2nd generation. There is significant variation among ethnic/source region groups, with children from Chinese and Indian immigrant families registering the highest educational attainment. However, very few 2nd generation ethnic groups do not outperform the 3rd-and-higher generation. Immigrants to Canada are more highly educated than the population as a whole, and this higher parental education accounts for perhaps one-half of the (numerically positive) educational attainment gap between the 2nd and 3rd-and-higher generations. Location of residence is important, as the 2nd generation lives disproportionately in large urban areas where educational attainment is higher. "Ethnic capital", typically measured by the educational and income levels of the group as a whole, plays a role, accounting for perhaps a quarter of the gap, and likely much of the inter-source region group differences in educational outcomes. Parent's expectations also play a role, often an important one. But much of the gap persists even after adjusting the data for all of these effects, particularly among the higher achieving ethnic groups such as the 2nd generation with Chinese and Indian immigrant parents, two of the larger immigrant groups in recent decades.

The effect of parent's education on the educational attainment of the children is weaker among families with immigrant rather than Canadian born parents. Put another way, the intergenerational transmission of education is weaker (only about one-third as strong) among immigrant families than Canadian born families. This weaker association results largely from the fact that children from less educated immigrant families are more likely to achieve a higher level of education than are their Canadian born counterparts from families with similar (low) levels of education. This is a positive effect for immigrant families, since lower educational levels of the parents are less likely to be passed on to the children of immigrants than is the case for the children with Canadian born parents. Turning to the effect of parents income on the educational outcomes of the children, it is well known that, in general, after accounting for the education of the parents, parent's income has only a weak effect on educational outcomes of the children. In immigrant families this result appears to be even more pronounced, since family income is found to have little effect on the educational outcome of the children (after controls for parents education and other factors), and little effect on the intergenerational transmission of education.

7. As the authors point out, this does not necessarily mean that this effect is causal; unobserved differences in abilities of immigrants across successive cohorts may be resulting in both lower immigrant earnings and a smaller university completion rate among their children.

Finally, the positive educational attainment gap between the 2nd and 3rd-and-higher generations appears to have grown between the 1960s and 1980s entering immigrant cohorts (based on evidence using the 1.5 generation as a proxy for the 2nd generation). The rising positive gap was driven primarily by the rising share of Asians and other visible minorities among the entering immigrant population. These groups are more likely to send their children to university than immigrants from other source countries. This increase in the positive gap may continue in the future, for reasons discussed in the conclusion.

3 Educational Outcomes among Children of Immigrants in the US

3.1 The Gap Between the 2nd and 3rd-and-higher generations

The 2nd generation in the US (the children of immigrants) look very much like the 3rd-and-higher generation regarding educational attainment, based on unconditional comparisons (no controls, Card, DiNardo, and Estes (2000). Using data from the 1940s to the mid 1990s for those aged 16 to 66, they find that both the mean number of years of education and the distribution of educational attainment between these two groups are very similar. Furthermore, this similarity has been long lasting, observed in the 1940, 1970 and mid 1990s data (Card, DiNardo, and Estes 2000)⁸. Using Current Population Survey (CPS) data from the mid 1990s, Chiswick and DebBurman (2004) find that the 2nd generation has a slightly higher level of educational attainment, 0.5 years more than the 3rd-and-higher generation. Card (2005) also finds a 0.4 year advantage for 2nd generation over 3rd-and-higher generation immigrants, after controlling for age only. Using more recent CPS data from the early 2000s, Aydemir and Sweetman (2008) find that years of schooling are roughly the same between the two generations.

However, Card et al (2000) find that conditional on parental background, second generation Americans have higher levels of education than the 3rd-and-higher generation. Other things equal (notably parents education), being a child of an immigrant parent in the US tends to result in higher educational outcomes. Card (2005) shows that second generation sons whose fathers had as little as 10.4 years of schooling (well below the mean) ended up ahead of their 3rd-and-higher generation counterparts. And the sons of Mexican immigrants who had very low levels of schooling (5.5 years less than native born fathers), ended up with 12.2 years of schooling, closing 80% of the education gap with the 3rd-and-higher generation faced by their fathers.⁹ These findings are consistent with those for Canada by Bonikowska (2008) who finds that the large educational advantage of the 2nd generation is driven by sons and daughters from families with lower levels of educational attainment. However, even though after controlling for family background, notably parent's education, the 2nd generation outperforms the 3rd plus educationally in the U.S., the much lower educational attainment of the parents in Mexican and other Hispanic immigrant families remains an important feature of the immigrant landscape. It has important implications for the educational outcomes of future cohorts of 2nd generation Americans. We will return to this notion in the conclusion.

3.2 Ethnic group differences

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8. Interestingly, the educational attainment of immigrants (the first generation), is lower than the 3rd-and-higher generation in the US, while in Canada it is higher.
 9. The mean level of education of 3rd-and-higher generation sons is 13.3 years (14.4 for daughters), and it was 12.2 for 2nd generation male Mexicans (12.4 for females).

The American sociological literature, concerned with a host of 2nd generation outcomes, including educational outcomes, turns to the theory of “segmented assimilation”. This theory predicts that different 2nd generation ethnic groups will experience very different outcomes (Portes and Fernandez-Kelly (2008), Zhou (1997), and Zhou et al. (2008)). The theory outlines exogenous factors at play, the principle barriers confronting immigrant children, and finally produces predictions of the path (upward or downward) that may be followed by the 2nd generation of a particular ethnic group, as determined by these two earlier components. These components consist of:

A) Exogenous factors (important determinants of outcomes of the children of immigrants)

- human capital of parents
- social context that immigrant groups face
- composition of the immigrant family (importance of single parents vs two parent families)

B) Barriers

- discrimination
- bifurcated labour markets (a “hollowing out” of the occupational structure, with fewer middle earning jobs, more low and high paid jobs).
- alternative deviant lifestyles (gangs and drugs)

This theory is driven by the particular context that exists in the US. Boyd (2002), for example, has argued that it does not apply to Canada. The incidence of lone parents and the deviant lifestyles referred to in the theory, associated with a few ethnic groups, are less evident among immigrant groups in Canada. Boyd suggests that there is less “downward assimilation” in Canada than in the US, at least regarding educational outcomes.

The theory predicts significant variation in outcomes by ethnic group. Portes and Fernandez-Kelly (2008) note that parent’s human capital and family socio-economic status (SES) are closely associated with national origins in the US: high human capital immigrants come predominantly from China, India, the Philippines, and South Korea. Low-human capital immigrants originate from nearby Latin American and Caribbean nations, and Mexico. Hence, 2nd generation outcomes are stratified along these lines.

The “downward assimilation” about which much of the American sociological literature is concerned, is associated with a greater likelihood of being in a single parent family, having less educated parents, existing in a less “welcoming” environment, and having a greater likelihood of adopting deviant lifestyles. This downward assimilation tends to be associated with the second group of immigrants mentioned above. However, Zhou et al. (2008) point out that one has to be careful of such generalizations, and the term “downward assimilation” may be misleading. Most children of newcomers in the “new” immigration since the early 1970s, consisting of many more racial minority groups, achieve rates of social and economic mobility that are comparable to, or better than, those of earlier waves of European immigrants (Alba and Nee 2003; Bean and Stevens 2003). For example, recent data suggest that Mexican immigrants have made considerable gains over three generations in narrowing the educational and income gaps with native born Whites (Perlmann and Waldinger 1997; Smith 2003). And as noted above, conditional on parents background characteristics, on average the children of Mexican immigrants outperform those of the 3rd plus generation.

Zhou (1997), in a review of the sociological literature, asks what constituted some of the major determinants of the educational attainment of contemporary 2nd generation Americans. Parents’ socio-economic status (measured by educational attainment and occupation) clearly mattered. However, Steinberg (1996) found that ethnicity played a strong role, even after accounting for

explanatory variables such as the payoff of schooling, peer group effects and attributional styles. This tendency of ethnicity, even after controls, to strongly affect schooling outcomes has been enduring puzzle in the sociological literature (Feliciano 2005). In her review, Zhou (1997) points to other important determinants of 2nd generational educational outcomes, including family structure. Children of immigrants from intact families demonstrate higher academic achievement and stronger educational aspirations than those from single parent families (Rumbaut 1994; 1996 and Portes 1995). In addition, describing factors that resemble what economists would call “ethnic capital”, Zhou (1997) for example, contends that the greater the involvement in one’s ethnic community, the tighter the ethnic community, and the greater the conformity to the group’s expectations, the superior the outcomes. Community characteristics such as persistence in the bottom economic stratum, particularly for Mexicans, and discrimination encountered in childhood play an important role (Ogbu 1991; Perlmann and Waldinger 1997; Portes and MacLeod 1999).

Using data from The Children of Immigrants Longitudinal Study in California, Rumbaut (2005) assesses the determinants of the number of years of schooling for these children in 2005, based on their characteristics as reported during the 1991 to 1995 period. He employs four groups of variables: basic characteristics¹⁰, family SES context¹¹, educational expectations, and early academic achievement scores. Parental socio-economic status is significant, even after controls for expectations and early academic achievement. Ethnic group differences¹² persist even after controlling for family context (parents education, proportion single parents, etc.), just as they did in Canada.

Rumbaut (2005) finds that the children of Mexican immigrant parents receive less schooling, and the Vietnamese the most schooling, even after controls for family background. However, many of these ethnic group differences become insignificant or marginally significant when parents’ expectations and students’ efforts are added to the regression, suggesting that these variables may account for much of the intergroup differences that persist after controlling for the basic variables such as parents education and family type. Educational expectations is a strongly significant variable (within the context of many other controls), as are, not surprisingly, early educational achievement scores.

Economists have also noted the heterogeneity in education and earnings outcomes by source region background of the children’s parents. Card et al. (2000) show that in the mid-1990s male second generation Americans whose parents were from Mexico and other Central/South American countries had fewer average years of education than the 3rd-and-higher generation (11.7 vs. 13.0). Those children whose parents were from Europe (13.8), Asia (13.5) and the Caribbean/ Africa (13.2) had more years of education. The same general pattern is evident among immigrants themselves (the first generation who are the potential parents of the 2nd generation). Those from Mexico and other Central/South America countries have fewer years of education, those from the other three regions higher levels.

Since educational attainment of the parents is a major determinant of the educational outcomes of the children, the low levels of parental educational attainment among Mexican/South/Central American parents is clearly significant, as suggested by the “segmented assimilation” theory. It is also significant in the US because the share of immigrants from Mexico/South/Central America has been rising, increasing from 14% in 1970 to 42% by the mid 1990s (Card et al, 2000). Hence the share of the second generation with parents from these countries will

10. Age, education and ethnicity.

11. Parental SES, including education and occupation, family type, number of children.

12. Mexican, Cambodian, Filipino, and Vietnamese compared to Asian reference group.

increase in the future, suggesting a potential decline in the educational and labour market outcomes of 2nd generation Americans as a whole.

3.3 The Intergenerational Transmission of Education among Immigrant Families

The degree of upward educational mobility between immigrant parents and their children is one of the most important determinants of the success of immigrant economic integration in the long run. A high degree of intergenerational “stickiness” among groups where the immigrant parents have low educational levels will result in relatively poor outcomes for the children.

Overall, the degree of “stickiness” in the intergenerational transmission of education among immigrant appears to be similar to or somewhat higher than that of American born families. The intergenerational correlations of education (the extent to which the child’s education is dependent on the father’s) were in the .4 to .45 range, and changed little over the two periods covered, 1940 –70, and 1970-95 (Card et al. 2000). This means that between 40% and 45% of the educational advantage (or disadvantage) of the parent is passed on to the child. More recent work by Card (2005) suggests an intergenerational correlation in education of around .3 for immigrant families, about the same as among the American born population. The lower intergenerational correlation of education means that the rate of educational assimilation (1 minus the correlation) may be increasing among more recent cohorts of immigrants to the U.S..

Card et al (2000) find that at least for the transmission between immigrant parents in 1970 to their children in 1995, it is the father’s education, not earnings that matters to their children’s educational attainment. Father’s earnings exerted no influence on the educational and labour market outcomes of the 2nd generation, after fathers’ education was controlled for. This is consistent with other recent Canadian research suggesting family income had little effect on the intergenerational transmission of education among immigrants (Aydemir, Chen and Corak 2008).

However, the degree of educational mobility appears to be higher in Canada than in the US. Aydemir, Chen and Corak (2008) found only a weak association between the educational attainment of immigrant parents and their children, and estimated intergenerational correlations of education in the .13 to .16 range (ie only about 15% of the educational advantage or disadvantage of the parent was passed on to the children). Intergenerational educational mobility was higher among this group than among their US counterparts, and perhaps more importantly, higher than among the 3rd-plus generation in Canada. And as noted in the Canadian section of the paper, this low correlation appears to be related to the fact that it is the children from immigrant families with low educational levels who are achieving the most mobility, by acquiring higher educational levels than their 3rd plus generation counterparts from similar families.

Smith (2003) looked at educational and wage integration across generations for the Hispanics in the US. It is among this population that sociologists in particular have been concerned about “downward assimilation”---the notion that because of low parental education levels, the preponderance of single parent families, and the potential involvement in drugs and gangs, these particular groups are not likely to integrate towards the middle class, and demonstrate little advancement intergenerationally. Smith contends that this view is based on a

misinterpretation of the data. He notes that *cross-sectional* data on 1st and 2nd generations of Hispanics indeed show little intergenerational gains in educational attainment or wages¹³. However, he points out that one needs longitudinal, not cross-sectional data, to study the degree of integration that takes place between the 1st and 2nd generation. This integration is measured by the change in the educational attainment and/or wage gap between the 1st or 2nd generation, and the comparison group, the 3rd plus generation. Smith (2003) points out that cross-sectional data are not appropriate because the 1st generation (immigrants) included in the sample are not the parents of the 2nd generation (the children of immigrants) in the sample, and hence one is not measuring intergenerational change in assimilation or integration. He sets up quasi longitudinal data by creating 25 years lags between the parents and the children (as adults) to approximate a comparison of the 1st generation parents with their 2nd generation children. Set up this way, he finds two things. First, there are large educational attainment gains between the first and second generations among Mexicans specifically, and Hispanics in general. For example, the Mexican immigrants born during 1945 to 1949 had 7.8 years of schooling, while their American born sons had 12.1 years. The same was true for Hispanics as a whole. Blau and Kahn (2005) also concluded that the educational attainment of Mexican-Americans increases substantially between the first and second generation. This is not too surprising, since intergenerational educational attainment was rising for the American population as a whole over this period.

Of more interest is the comparison of both 1st and 2nd generation Hispanics to 3rd-and-higher generation White men. Smith (2003) finds a declining (negative) educational attainment gap. For example, among this same cohort of immigrant Mexicans born between 1945 to 1949, the age adjusted educational attainment gap with the 3rd-and-higher generation Whites was 5.6 years of education for the immigrant parents (a deficit), and only 1.0 years for their American born children. For Hispanics as a whole, the comparable numbers were 3.8 and 0.7. Hence, unlike the cross sectional data which showed little difference in the educational attainment gap between the 1st and 2nd generation with the 3rd-and-higher generation, the longitudinal data demonstrate a major closing of the gap intergenerationally.

3.4 Summary

On average, American children with immigrant parents have (unadjusted) educational attainment levels roughly equal to, or marginally higher than, the children of American born parents. But parental educational attainment is lower, in the aggregate, among immigrant than American born families. Hence, based on adjusted data (accounting for differences in parents educational attainment, location, family status and other variables), the 2nd generation is seen to outperform the 3rd-and-higher generation educationally.

But as in Canada, there are significant ethnic group/country of origin differences. In the US, Latin American, Caribbean and Mexican immigrants have significantly fewer years of schooling than those from China, India, the Philippines and South Korea, for example. These differences result in the inter-ethnic group differences in the educational attainment of the children of immigrants. But even after accounting for ethnic group differences in family background and other standard variables, much of the ethnic group difference in educational attainment of the children persists in the U.S., just as in Canada.

13. It compares the 1st and the 2nd generation with the 3 plus generation of the same age at any given time, say the mid 1990s. The data show that the educational attainment gap with the 3rd-and-higher generation is roughly the same for the 1st and 2nd generations, suggesting little catch up. The same is observed for the wage gaps with the 3rd-and-higher generation.

The American sociological literature turns to the theory of “segmented assimilation” for guidance regarding a host of outcomes of the children of immigrants, including educational attainment. Like the economists, they find parents’ education and socio-economic status important, but even after accounting for these factors, differences in educational outcomes among ethnic groups persist. Parental expectations regarding educational attainment appears to play a major role, as does family status: 2nd generation children from intact families are seen to have superior outcomes.

The extent to which the parents advantage (or disadvantage) in educational attainment is passed on to their children appears to be about the same (or marginally greater) among immigrant as among American-born families, but is greater than among immigrant families in Canada. There may be dimensions of the Canadian education system that result in higher levels of educational mobility between generations; it is seen among both the Canadian born as well as among the immigrant community. As in the Canadian case, some research suggests that within the 2nd generation the major intergenerational educational gains are made by children whose parents have very low levels of education. And also as seen in Canada, it is the parents’ education, not income, that is the primary determinant of educational outcomes of the children.

Much of the concern regarding the educational outcomes of the 2nd generation in the US focuses on the Hispanic immigrant community. However, significant gains in relative educational attainment (relative to the 3rd plus generation) are observed as one moves from the immigrant (1st generation) group, to their children, and even to the 3rd-and-higher generation. Little evidence of “downward assimilation” is observed in this research, at least regarding educational attainment outcomes. Nonetheless, given the low levels of educational attainment among Hispanic immigrants, educational gaps (with the 3rd-and-higher generation) may well persist among the 2nd generation in these ethnic groups, in spite of the gains that they are making.

4 A summary of the determinants

The determinants of second generation *educational* outcomes suggested by this review include the following:

- Parental educational attainment
This variable accounts for perhaps half of the (positive) gap in educational attainment between the 2nd and 3rd-and-higher generations in Canada. And after adjusting for parental educational attainment, a positive gap develops between the 2nd and 3rd-and-higher generation in the US. While a major determinant of the outcomes of children of immigrant families, its effect is less among immigrant than native born families, at least in Canada. Growing up in a family with less educated parents appears to be less of a disadvantage among immigrant than native born groups.
- Location
Families living in large urban areas tend to have higher levels of educational attainment than others, and the 2nd generation tends to cluster in such urban areas.
- Ethnic Capital
Usually measured by the ethnic group’s average education or income, this variable may account for one-quarter of the gap between the 2nd and 3rd-and-higher generation.
- Ethnic group/Source Region/Visible Minority Status

Even after adjusting for variables such as those mentioned above, ethnic group differences in educational attainment persist among the 2nd generation. Blacks (in Canada) and Hispanics (in the US) tend to have lower levels of educational attainment, and Asians higher levels.

- **Parental Expectations**

This variable is important in selected American and Canadian research. Its effect persists even after accounting for parental educational attainment, and in at least one study is seen to be as important. In another study it accounted for a significant share of the ethnic group differences in 2nd generation outcomes.

- **Family Type and Composition**

The American sociological literature suggests that children from intact immigrant families demonstrate higher levels of academic achievement and stronger educational aspirations than those from single parent families. This variable is seen as particularly important among Blacks and Hispanic ethnic groups.

5 Conclusion

Conditional on family background, location and other basic demographic variables, the children of immigrants attain higher levels of education than those with native born parents in both countries. Unconditionally, the 2nd generation attains levels much higher than the 3rd-plus generation in Canada, and levels roughly equal to those of the 3rd plus generation in the US. There is very significant variation by ethnic group in both countries, driven in part by differences in the parent's educational attainment, "ethnic capital", family composition, and possibly parents' expectations regarding higher education. But even after accounting for the effects of such variables, inter-ethnic group differences remain. However, in Canada there are few 2nd generation ethnic groups that do not outperform the 3rd-and-higher generation, while in the US those with Mexican, Caribbean and South American backgrounds attain, unconditionally, lower levels of education than the 3rd-and-higher generation. And the shift in source regions/ethnic groups over time is a major part of the story regarding changes in educational outcomes of the children in both countries.

Both Canada and the US have experienced the "new" immigration since the 1960s, when source country was eliminated as the basis for immigrant selection. During the 1970s and 1980s in particular, there was a major shift in immigrant source regions. In Canada this meant an increased share of immigrants from Asia (notably China, India) and Africa, and in the US increasing shares from Mexico and Central and South American countries (Appendix table 1). At the same time, Canada moved to a "points" system for skilled economic migrants, which emphasised educational attainment. This change resulted in an immigrant inflow with educational levels higher than that the Canadian-born population. In the US, immigration is driven primarily by family reunification objectives, where education is not necessarily accentuated. Hence, educational levels are lower. These differences hold important implications for 2nd generation outcomes, given the importance of parental education as a determinant of the children's educational attainment.

For the larger source region immigrant groups in the US, the educational level of the parents is below that of the American population. Thus, some of the larger 2nd generation groups register, unconditionally, relatively low levels of education compared to the 3rd plus generation, notably those with Mexican, Caribbean and South American backgrounds. This holds even though, conditional on family backgrounds, these same groups achieve equal or higher levels of

education as their similar 3rd plus generation counterparts. The lower SES status of the family is difficult to overcome in one generation.

Canada faces a very different situation because the children of the major immigrant ethnic groups (the Chinese, Indians, etc) come, on average, from families with high levels of educational attainment, higher than that of Canadian families in general. These major immigrant groups also have high levels of “ethnic capital”, and a strong belief in the importance of education as a means of upward mobility. And there may be some characteristics of the Canadian education system that promotes educational mobility among generations, particularly upward mobility in less educated families. For example, although in general Americans are more likely to attend university than Canadians, Canadians from lower income families (the bottom quartile of the family income distribution) are more likely to attend university than their American counterparts¹⁴.

The overall result of all of these factors is a very high level of educational attainment among 2nd generation immigrants in Canada, particularly the visible minority groups.

And this US – Canada contrast in 2nd generation educational outcomes may increase in the future. During the past 20 years, US immigration moved increasingly towards South and Central America, including Mexico, groups with relatively low-levels of education¹⁵. Among new male adult immigrants who entered the US in the late 1970s, about one quarter of the immigrants were from South and Central America; among the early 2000s entering cohort this share had risen to one half. And the share of *all* adult entering immigrants with a university degree changed little, from 33% to 35% over the same period, meaning that their *relative* educational attainment, relative to the American population in general, had been falling. Canada, on the other hand, moved towards immigrants from China and India, at least in part under a points system that increasingly valued educational attainment¹⁶. The share of entering male immigrants from East and South Asia rose from 16% to 41% between the late 1970s and early 2000s entering cohorts, and the proportion with degrees rose from 26% to 60% over the same period (appendix table 1).

Given the importance of parental educational attainment, ethnic group background and ethnic capital as determinants of the educational attainment of the second generation, these trends hold important implications for the two countries. It seems likely that, unconditionally, in Canada the educational attainment of the 2nd generation will increasingly surpass that of the 3rd-and-

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14. There may be a number of reasons for this. The more obvious ones might include a more homogeneous elementary-secondary school system in Canada that likely provides a more comparable education to rich and poor families alike, the method of school funding, which being provincial, tends to distribute resource more equitably to rich and poor neighbourhoods alike, unlike the situation where funding is local, and finally, possibly some differences between the two countries in the student loan and financing arrangements.
 15. For example the share of 25-54 year old immigrants born in Mexico who hold a university degree has been increasing. Among males it rose from 3.9% among “recent” immigrants in 1980, to 7.0% in 1990, and 6.8% in 2000. The corresponding numbers for women are 2.6%, 7.3% and 8.3%. However, the educational attainment of this group remains far below the average for immigrants as a whole, at around 35%. Hence, in spite of this increase in the educational levels, and the fact the conditional on parental background the 2nd generation of Mexican background outperforms the 3rd plus generation, the increasing share of immigrants from Mexico since 1980 is likely to reduce the educational attainment of the 2nd generation on average in the future, given that parental education is an important determinant of 2nd generation educational attainment.
 16. About one half of all immigrants to Canada enter under the “skilled economic immigrant” class, but many of these are spouses and children of the “principle applicant”. About one-quarter of all immigrants are actually assessed under the points system employed in the skilled economic immigrant class.

higher generation. The positive educational attainment gap is likely to grow. In the US, the unconditional educational attainment gap between the 2nd and 3rd-and-higher generations may decrease and turn negative. This outcome may occur even though there is significant intergenerational improvement in educational outcomes between the 1st and 2nd generations in the U.S., and conditional on the basic background variables, the 2nd generation outperform their 3rd-and-higher generation counterparts.

Appendix 1

Source regions composition and educational attainment of new immigrants in the U.S. and Canada, age 25 to 54

	Men				Women			
	1980	1990	2000	2005	1980	1990	2000	2005
USA	percent							
Source region								
North America	2.6	2.0	2.6	1.8	2.8	2.1	2.8	2.1
Carribbean	7.0	7.2	6.9	5.1	7.6	7.7	7.8	6.2
South and Central America	25.1	32.2	40.6	49.3	24.8	30.9	36.6	40.9
Northern Europe	4.4	3.9	3.3	2.6	4.4	3.5	2.7	2.1
Western Europe	2.7	2.5	3.0	2.2	3.4	2.9	2.9	2.0
Southern Europe	4.5	1.9	1.7	1.3	3.8	1.5	1.6	1.2
Eastern Europe	6.0	6.2	7.7	5.5	6.0	5.8	8.7	7.0
Africa	3.9	3.9	5.8	5.9	2.1	2.3	5.0	5.5
South Asia	5.4	5.6	8.7	8.5	4.1	4.1	7.1	7.2
Southeast Asia	13.4	9.3	5.6	5.2	16.2	13.7	8.4	9.4
East Asia	12.8	15.6	10.4	9.1	14.4	17.2	12.9	12.7
West Asia	6.4	4.4	2.9	2.5	4.8	3.7	2.6	2.6
Oceania & other	5.8	5.2	0.9	1.0	5.6	4.6	1.0	1.1
With a university degree	33.0	33.9	36.3	35.0	19.7	26.0	32.3	36.0
Canada								
Source region								
North America	6.9	2.4	1.6	1.9	7.9	3.5	2.1	2.4
Carribbean	6.8	4.5	3.0	2.9	7.2	6.0	3.6	3.2
South and Central America	6.4	8.8	4.4	7.2	6.6	9.2	5.2	7.7
Northern Europe	17.3	4.7	2.6	3.0	15.0	4.9	2.0	2.1
Western Europe	5.7	2.5	3.6	3.4	5.6	2.7	3.2	2.7
Southern Europe	7.9	5.3	5.3	2.4	7.2	4.3	4.8	2.1
Eastern Europe	5.7	12.9	10.3	9.9	5.5	11.3	11.0	10.8
Africa	6.5	8.6	9.6	12.7	5.4	5.8	7.4	9.7
South Asia	6.2	9.8	18.7	20.3	6.9	7.3	15.1	17.8
Southeast Asia	14.9	11.2	6.5	7.2	15.6	15.7	9.9	10.5
East Asia	10.0	19.2	25.1	20.4	11.9	21.4	27.9	23.1
West Asia	4.4	9.3	8.6	8.0	3.6	7.1	7.3	7.2
Oceania & other	1.5	0.7	0.6	0.8	1.5	0.7	0.5	0.6
With a university degree	26.2	28.2	52.9	59.7	16.4	21.1	41.7	51.1

Note: New immigrants include those who immigrated to Canada within the previous 5 years.

Source: Bonikowska, Hou, and Picot (2009).

Data Source: Census of Population, Canada and US

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