

Provided for non-commercial research and education use.  
Not for reproduction, distribution or commercial use.



This article appeared in a journal published by Elsevier. The attached copy is furnished to the author for internal non-commercial research and education use, including for instruction at the authors institution and sharing with colleagues.

Other uses, including reproduction and distribution, or selling or licensing copies, or posting to personal, institutional or third party websites are prohibited.

In most cases authors are permitted to post their version of the article (e.g. in Word or Tex form) to their personal website or institutional repository. Authors requiring further information regarding Elsevier's archiving and manuscript policies are encouraged to visit:

<http://www.elsevier.com/copyright>



Contents lists available at ScienceDirect

Social Science Research

journal homepage: [www.elsevier.com/locate/ssresearch](http://www.elsevier.com/locate/ssresearch)

## Comparisons of the success of racial minority immigrant offspring in the United States, Canada and Australia

Jeffrey G. Reitz<sup>a,\*</sup>, Heather Zhang<sup>b</sup>, Naoko Hawkins<sup>c</sup>

<sup>a</sup> Munk School of Global Affairs, University of Toronto, 1 Devonshire Place, Toronto, Ontario, Canada M5S 3K7

<sup>b</sup> Department of Sociology, McGill University, Room 713 Leacock Building, 855 Sherbrooke Street West, Montreal, Quebec, Canada H3A 2T7

<sup>c</sup> Department of Sociology, University of Toronto, 725 Spadina Ave. Toronto, Ontario, Canada M5S 2J4

### ARTICLE INFO

#### Article history:

Received 29 October 2009

Available online 7 April 2011

#### Keywords:

Second-generation immigrants

Immigrants

Economic integration

Inter-generational mobility

Segmented assimilation

Cross-national comparison

Racial minorities

### ABSTRACT

The educational, occupational and income success of the racial minority immigrant offspring is very similar for many immigrant origins groups in the United States, Canada and Australia. An analysis based on merged files of Current Population Surveys for the United States for the period 1995–2007, and the 2001 Censuses of Canada and Australia, and taking account of urban areas of immigrant settlement, reveals common patterns of high achievement for the Chinese and South Asian second generation, less for other Asian origins, and still less for those of Afro-Caribbean black origins. Relatively lower entry statuses for these immigrant groups in the US are eliminated for the second generation, indicating they experience stronger upward inter-generational mobility. As well, 'segmented assimilation' suggesting downward assimilation of Afro-Caribbean immigrants into an urban underclass in the US, also receives little support.

© 2011 Elsevier Inc. All rights reserved.

### 1. Introduction

As the employment situation of newly-arriving and mostly racial minority immigrants varies considerably across countries and for successive cohorts, there has been increased interest in fate of their children, the so-called second generation. One question is whether these persons, as native-born products of their host societies, achieve more successful labour market integration than their parents, and how the struggles of the immigrant parents in certain contexts affect their children (Reitz and Somerville, 2004). This paper extends existing analyses by providing direct comparison of the education, occupational status and incomes of the second generation between the United States, Canada and Australia. We examine specific origins groups such as whites, Afro-Caribbean blacks, Chinese, and South Asians to determine whether immigrant success, and the context of immigrant reception, affects the educational and employment success of immigrant offspring.

Previous studies of the second generation within countries have shown certain similar themes of success and difficulty. A basic idea can be formed by comparing US studies for example by Farley and Alba (2002), Portes and Rumbaut (2001), and Fernandez-Kelly and Portes (2008); with Canadian studies by Boyd (2002), Pendakur and Pendakur (2002), and Corak (2008); and Australian studies such as by Inglis and Model (2007). One common theme is the high achievement of second-generation Asians. This 'model-minority' outcome applies particularly to Chinese and South Asians, but to other Asian origins as well. In each country, the children of Asian immigrants have been shown to achieve very high levels of post-secondary education, and as a result and despite certain labour market obstacles their earnings are fairly high. A second theme is disappointing results for certain other origins groups. In the US this is most clear in the case of the Mexicans and other Latin Americans.

\* Corresponding author. Fax: +1 416 946 8915.

E-mail address: [jeffrey.reitz@utoronto.ca](mailto:jeffrey.reitz@utoronto.ca) (J.G. Reitz).

URL: <http://www.utoronto.ca/ethnicstudies> (J.G. Reitz).

However, in both the US and Canada, second generation Afro-Caribbeans although relatively more successful compared to Mexicans and Latin Americans in the US, have less positive educational outcomes compared to Asians, and considerably more difficulty translating educational attainment into occupational and earnings success. Because the immigrant parents in these cases are on average better-educated than Latin Americans in the US, their poverty rates are not as high. Nevertheless compared to Asians, the black second generation struggles.

Despite these common themes it is important to ask whether second generation outcomes vary across countries, and if so the extent and reasons for any such variations. Of course some differences are expected based on the different composition of the immigrant populations in the respective countries, for example the prevalence of Mexicans and other Latin Americans in the US more than in either Canada or Australia. Mexicans and other Latin American immigrants differ not only in terms of race but also are characterized by substantial skills disadvantages which may carry over to affect the longer-term potential for successful integration of their descendants (Borjas, 1994; Antecol et al., 2003). The dual disadvantage of race and skills seems to have affected descendants of previous waves of immigrants (on the US see Borjas, 1994; Alba et al., 2001; on Canada see Sweetman and Dicks, 1999). Of particular interest today is the question of whether there are differences for the offspring of relatively highly-skilled immigrants of non-European origins, such as Chinese, South Asians and Afro-Caribbean blacks. Do the children of recent Chinese immigrants, for example, do equally well in each country? Are the children of black immigrants more successful in some countries than in others?

There are many differences among the three countries, which could affect the second generation. One is the situation of the immigrant parents, which previous research has shown does vary cross-nationally, shaped by differences in immigration policies and the selection and self-selection of immigrants, urban patterns of settlement and distinctive educational and labour market institutions in each country (Reitz, 1998). The question there is whether cross-national differences in the employment success of immigrants carry over into the second generation. As well, there are differences that may have a direct effect on opportunities, constraints and influences experienced by the children of immigrants. These include educational opportunities, labour market structures, the potential for 'segmented assimilation' into native-born minority-community segments of the population, and the socio-cultural climate which may be affected by the different context for ethno-cultural relations in the three countries.

The source of data for the United States is the Current Population Survey (CPS), now a standard source for study of the immigrant second generation in that country. We use a merged file combining seven distinct samples interviewed over the period 1995–2007 (US Bureau of the Census, 2006). For Canada, the 2001 public use census file identifies the second generation (Statistics Canada, 2006), and for Australia the 2001 public use census file, basic and expanded versions (Australian Bureau of Statistics, 2003). The analysis builds on a previous paper (Reitz and Zhang, 2011) which examined educational attainments of the second generation in the US and Canada. The analysis here includes also occupational status and incomes, and extends the comparison to the case of Australia.

## 2. Framework: cross-national and inter-urban variation in institutional contexts

The educational and economic success of immigrant offspring in a particular society is affected by various factors, which may be inter-related as depicted in Fig. 1. These include (A) the characteristics of immigrant parents themselves, such as their level of education, family composition, age and time of arrival, and social and economic resources at the point of immigration, (B) the socio-economic attainments of these immigrant families within the host society, and the resources they acquire and have available for their offspring, which are in turn affected not only by the characteristics of the immigrants, but also by (C) opportunities available from, and constraints directly imposed by, the host society on the second generation. Effects of the host society are specific to the urban setting in which immigrants and their children are resident.

The significance of immigrant characteristics (A) for the second generation is to some extent clear from studies within each country. It is well known that immigrants in the US are less skilled in the sense of having less formal education relative to the native-born population than their counterparts in Canada and Australia. This as well as the resulting economic hardship undoubtedly is important in accounting for the poor educational and labour market outcomes for second generation Mexicans. The relative success of the Asian second generation undoubtedly can be traced at least in part to the more highly-skilled and successful Asian immigrant generation. From a comparative perspective, however, what is of particular

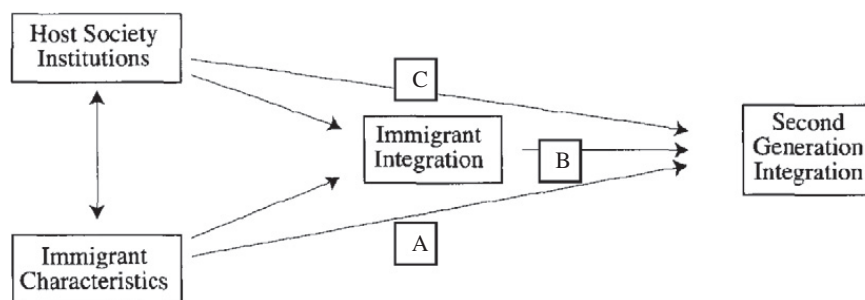


Fig. 1. Host Society Institutions in the integration of the immigrant second generation. Source: Reitz and Somerville (2004, p. 389).

interest is how host society characteristics may affect the second generation either by their impact on the success of immigrant parents (B), or directly on the second generation itself (C).

Host society characteristics definitely affect the employment success of immigrant parents. At least beginning in the 1970s, immigrants to the United States from most origins, including specific Asian origins, occupied less favourable positions within the socioeconomic hierarchy than did their counterparts in Canada or Australia (Reitz, 1998, 2001b). Borjas (1988, 1990) had noted this difference, arguing that immigration policies explained the difference. Reitz (1998) showed that immigration policy effects, while significant, are comparatively weak, and that other factors such as labour markets, education, and social welfare have more impact in shaping immigrants' economic status. Labour market institutions, such as unions and segmented labour markets, play a role in immigrant economic success. US labour markets are relatively less regulated compared to those in Canada and Australia, where unionization rates are higher. This appears to reduce wage inequality among immigrants and the native-born in those countries. Social services and income redistribution may also temper labour market outcomes. Canada and Australia have more generous welfare programs, although US immigrants actually may be more likely to use welfare (Reitz, 1998, pp. 215–219). In any case, the most important cross-national difference has been the educational levels of the native-born population within the host society. In the 1970s, higher levels of post-secondary education in the US native-born work force, particularly in the most immigrant-intensive cities, erected significant competitive barriers to the integration of even highly-skilled immigrants in the labour market, compared to what existed in Canada and Australia. Over time, all of these institutional sectors are changing, with somewhat different patterns of change in each country, altering the respective entry circumstances for immigrants and their resulting labour market success. Perhaps the most important of these changes has been the relatively rapid rise in levels of post-secondary education in Canada (Reitz, 2001a, 2003).

The focus here is on whether and how these differences in immigrant success may carry over to affect the second generation. If the Asian second generation, for example, is relatively successful in each country, did the lower relative economic status of Asian immigrants in the US compared to Canada or Australia carry over to reduce to any extent the relative position of their children? As well, we can ask how institutional contexts carry forward and impact the success of the offspring of immigrants in the US, Canada, and Australia. Do educational and employment opportunities in each country override the impact of differences in parental status? How do the labour market institutions that affect immigrant parents affect their children? In this study, we examine these possibilities indirectly by comparing the experiences of immigrants from the same origins in their adjustments in different settings. As previously argued (Reitz, 1998, p. 5), differences across settings for immigrants of similar origins suggest the impact that the setting itself has on immigrants. Such impacts may arise from differences in the selection and self-selection of immigrants, as well as differences in the processes of adjustment of immigrants within different institutional settings.

Comparative analysis also offers the potential for understanding the much-debated possibility of 'segmented assimilation.' Segmented assimilation refers to a process whereby immigrants may assimilate into different 'segments' within the host society, either the mainstream society or a minority community (Portes and Zhou, 1993; Zhou, 1997). In the US case, and because of its distinctive history of racial polarization, most attention has focused on Afro-Caribbean immigrants, and the extent to which they become part of the mainstream society or are affected by social and cultural trends within the relatively disadvantaged African-American community. Boyd (2002) suggested that a US–Canada difference could exist, based on processes related to segmented assimilation, because the potentially negative impact of US race relations would not affect Afro-Caribbean immigrants in Canada. Kasinitz et al. (2008), Attewell et al. (2010) and Foner (2003) suggested that these negative effects might be offset at least to a degree by positive advantages for black immigrant groups in the US as a legacy of the civil rights movement. In either case, segmented assimilation would apply mainly for blacks, with no such comparative expectation for Chinese or other groups. This study would be the first to provide quantitative assessment of the comparative situation of West Indian and African immigrants in the United States, where theory suggests segmented assimilation may apply, and in Canada, where theory suggests it would not.

Urban settlement patterns for immigrants differ cross-nationally, and this matters for immigrants, and hence potentially for their children. In all countries immigrants have settled in the most dynamic and competitive urban centres, where educational levels and incomes are higher but where their own relative position is lower. However, this trend has greater impact in the US because the cities in question depart more substantially from the national norm. As a result, immigrants in US cities such as New York, Chicago, or Los Angeles, perform relatively less well compared to the native-born than is the case for their counterparts in cities such as Toronto in Canada, or Sydney in Australia. If parental economic status carries over to the second-generation, then again the impact may be greater in the US.

### 3. Research design

The research design for this paper extends and modifies Farley and Alba's (2002) origins-specific analysis of the second generation in the US, using the CPS, to include comparison with Canada and Australia. Farley and Alba examined educational attainment, occupational achievement, and economic status of the second-generation.<sup>1</sup> The second-generation is mostly in

<sup>1</sup> A comparative analysis of educational and employment outcomes for immigrants and the second generation in the United States and Canada by Aydemir and Sweetman (2008) employed a different analytic framework directed at economic issues. Their approach did not facilitate identification of cross-national differences due to specific origins as opposed to characteristics of immigrants or of the national and urban contexts.

the age range between 25 and 39, and so this group is compared with its counterpart within the mainstream population – third- and higher-generation whites between 25 and 39. Their parents are in the age range over 50, and Farley and Alba include immigrants in this age group as a proxy for the parental generation. Although this analytic strategy is not ideal, it is a useful substitute, and we adopt it here. We also add a third- and higher-generation native-born comparison group, again whites in the same age range.

Our US data uses more recent waves of the CPS than Farley and Alba, merging all seven waves from 1995 to 2007 (Farley and Alba 2002, p. 678). The data for Canada come from the 2001 Canadian census public use micro data file (PUMF). For Australia we use data provided by the 2001 Census of Australia, the Confidentialised Unit Record File (CURF), both basic and expanded versions which are different samples and are used here in combination. The CPS household sample and the Canadian PUMF individual sample both require the use of sample weights. The overall sample for the four population groups described above is  $N = 454,853$  for the US, 321,381 for Canada and 141,627 for Australia. The second generation component is 16,550 for the US, 27,559 for Canada, and 19,087 for Australia. In all three countries, the second-generation is defined as including native-born persons with either one or both parents being foreign born immigrants. As mentioned above, these immigrant parents cannot be identified explicitly in the data, however the sample of immigrants aged 50 years and over may have characteristics which approximate those of the parents of the second generation, though of course some of these characteristics will have changed since the time the second generation was living at home.<sup>2</sup>

Since the three nations share large White, Chinese, South Asian and other Asian immigrant populations, these groups provide the best opportunities for comparison. In the US and Canada, the Afro-Caribbean second generation also may be compared. The Afro-Caribbean group includes persons who are black by race and of Caribbean or Latin American origins, with a relatively small group of sub-Saharan African origins. In the CPS, non-Hispanic Whites, Blacks, Mexicans, Puerto Ricans and Other Hispanic groups are identified based on the race and Hispanic origins questions. Chinese, South Asian, and other Asian immigrants are identified based on birthplace; the Chinese, South Asian and other Asian second generation is defined based on US birth and having at least one parent born in the respective region. The Canadian census includes a question with response options similar to those in the US race question, and the PUMF provides categories for Whites (in Canada persons of Hispanic origins are less than 1% of whites and need not be excluded), Blacks, Chinese, South Asians, and a residual category of other visible minorities (the Aboriginal population is excluded). A separate category for 'Other Asians,' consists of persons in the residual visible minority category identifying themselves as 'Other East and Southeast Asians' in response to the question on 'ethnic and cultural background.' Origins in the Australian census data are based on a question on ancestry. We identify whites as persons of European ancestry, and also Chinese, South Asians, Other Asians, a category for origins described as Arab, Middle Eastern and North African, and a final category for other non-European minorities.<sup>3</sup>

In each of these comparisons, it is important to keep in mind as well that there are variations in specific origins within these categories, variations with cross-national dimensions. For example, Chinese from Hong Kong origins are more prevalent in Canada and Australia, those from Taiwan more in the United States. South Asians from India are numerous in all three countries but those from Pakistan may be somewhat more prevalent in Canada compared to the US or Australia. Such variations no doubt affect the 'other Asian' group as well. The Afro-Caribbean group is also diverse, and the Spanish-speaking segment is larger in the United States. Nevertheless, the cross-national comparison of the broad categories is of considerable interest because of racial and cultural commonalities. Although the Hispanic groups in the US do not have such clear counterparts in the other countries, they may for some purposes be compared to the 'other Visible Minorities' in Canada, a category which includes many Latin Americans and persons of Middle Eastern background, and the corresponding groups in the Australian data.

Like Farley and Alba, we use various measures of educational attainment (mean years of education, high school completion and attainment of a bachelor's or higher degree) and occupational attainment (proportion in managerial and professional as opposed to service and manual occupations, and an occupational status score based on these data). For each origins group, a ratio of these statistics to the corresponding statistic for the mainstream population reflects the relative standing of the group. Categories of education and occupation available for the three sources are quite similar, and although variations in definitions exist across countries, these do not significantly affect the analysis of the relative position of origins groups compared to the mainstream, based on the ratios.

Also like Farley and Alba, we measure economic status using household income adjusted for household size, often called 'individual-equivalent' household income. This measure captures the economic circumstances of the households in which individuals reside, and hence reflects individual levels of economic comfort or distress. For many, individual-equivalent household income is affected primarily by their own individual employment success, while for others, it depends to varying degrees on the employment income of others in the household, or in cases of disadvantage on the household's access to the

<sup>2</sup> Within this benchmark group of older immigrants, a certain proportion arrived at a young age and might be considered as 1.5 generation, possibly more similar to the second generation than immigrant parents. They can be identified in the US and Canadian data, but since they are a small proportion (14% and 19% respectively) and since they cannot be identified in the Australian data file, their retention in the analysis is the best way to ensure cross-national comparability.

<sup>3</sup> The phenomenon of mixed racial origins has only a small demographic impact for these second generation groups. Mixed race cases are excluded from the main origins categories for the US and Canada. The Australian data include up to two ancestries, and the first reported ancestry is used here. In these Australian data, mixed-race cases are very infrequent. Of first-response non-European minorities, only 2% gave as a second response one of the other non-European minorities (about a third of these being first-response Chinese giving 'other East Asian' as the second). Another 2% mentioned a European origin and 2% mentioned 'Australian'.

social safety net (of particular significance in a cross-national comparison). Individual-equivalent household income is a meaningful measure of individual economic well-being because it takes account not only of individual employment income, but of other immediately-available resources and also of assumed liabilities. It also has practical value because it permits analysis of a larger part of the second generation sample than would be possible in an analysis limited to the labour force, and avoids some of the complexities of issues regarding gender and selection bias which arise in the analysis of employment earnings.

The coding of household income in the three data files is different, with the US providing dollar amounts in six digits, while Canadian and Australian public use files only providing broad categories. To achieve an equivalent set of categories it is necessary to sacrifice the more detailed information such as the US provides and use categories which can be created for each country, which are the Australian categories. Some loss of information is involved, which hampers analysis at the lower and upper extremes, but does eliminate the impact of extreme outliers. In the US data, income data for specific years from 1995 to 2007 are inflation-adjusted to 2001 values.

In the cross-national comparisons, our primary interest is in the position of particular second-generation origins groups relative to their mainstream counterparts, since it is this relative position which is of greatest importance within each country. The absolute characteristics of origins groups in one country relative to their counterparts in other countries may also be of interest, although some specific educational and occupational categories may be difficult to compare meaningfully (which is why most of our cross-national comparisons focus on origins-group/mainstream ratios). However, in the case of income and to enhance cross-national comparability, we have converted Canadian and Australian dollars to their US dollar purchasing power equivalents in 2001, based on OECD data (posted at <http://stats.oecd.org>; a Canadian dollar equals \$0.826, and an Australian dollar equals \$0.759).

In each country, immigrants tend to reside in certain key urban areas, and the second generation also is over-represented in these same cities (in the sense that the proportion of their populations in these cities is higher than the proportion of the mainstream population in the same cities). Hence their integration into society is shaped by the same urban contexts. The six most immigrant-intensive cities in the US are New York, Los Angeles, Chicago, Washington, San Francisco, and Miami. For Canada the emphasis is on Toronto, Montreal and Vancouver, and for Australia the primary immigration cities are Sydney, Melbourne, Brisbane and Perth. In these urban areas, educational and income levels of the native-born populations tend to be somewhat higher than the national averages. Because of this, the economic position of both immigrants and the second generation appears less favourable when considered in relation to urban area of residence than when the comparison is conducted at the national level.

Tables 1–3 provide comparisons of educational, occupational, and household income results, respectively, for immigrants and the second generation, by origins and age groupings, across the three countries. Table 4 describes the extent to which the immigrant and second generations tend to reside in key metropolitan areas within each country. In these descriptive tables, minorities are compared with the mainstream using overall means and percentages, and in addition a ratio is presented for easier comparison of relative urban concentration of minority groups across countries. Tables 5 and 6 present a series of country-specific regression analyses for individual-equivalent household incomes (unlogged<sup>4</sup>) for each country, which include urban area and human capital controls (as well as age, gender and marital status).

## 4. Results

### 4.1. Educational attainment

Direct comparisons of educational attainments for second-generation ethnic origins groups aged 25–39 with the mainstream group (defined above as third- and higher-generation whites) at the national level show quite similar patterns for the US, Canada, and Australia (Table 1). In these comparisons, note that educational levels for the mainstream population have been rising in all three countries, as evidenced in differences in educational levels for older and younger mainstream population groups. In the younger population, the US still maintains a lead in attainment of credentials such as a high school diploma and bachelor's degree, but mean years of education has risen more rapidly in Canada partly because of much faster expansion of non-university post-secondary education in that country (for further details, see OECD, 2010, pp. 34–39).<sup>5</sup>

In most groups, the second generation outperforms the mainstream population in educational attainment. Whereas there is significant cross-national difference in the relative educational attainment for the parental immigrant generation, this difference is virtually eliminated for the second generation. Immigrants in the US were (in the parental generation now 50 years of age or more) less educated than the American mainstream, whereas for Canada and Australia they were generally somewhat better-educated than the mainstream. However, the second generation across all countries have higher educational attainments compared to the mainstream, with Asians doing significantly better, and Afro-Caribbeans less so, about the

<sup>4</sup> The analysis uses raw household income data rather than logged data which is common in economics. Sociologists Portes and Zhou (1996) compared the use of logged and raw earnings of immigrants in the research literature, and concluded that logged earnings is suitable for studying rates of return but the use of raw earnings figures is a better choice for studying absolute economic outcomes. See also Hodson (1985) who emphasizes the use of unlogged rather than logged income data to compare coefficients in samples with different income levels.

<sup>5</sup> In 2001 data, although the proportion of persons aged 25–39 with bachelor's degrees is much higher in the US than in Canada (31.6% compared to 19.2%), the proportion with any post-secondary education is actually higher in Canada (65.9% in Canada compared to 60.2% in the US); see Reitz and Zhang (2011).

**Table 1**  
Educational qualifications, by generation, age and origin, for the United States, Canada and Australia. Sources: US Bureau of the Census, Current Population Survey, 1995–2007; 2001 Census of Canada, Public Use Micro-Data; 2001 Census of Australia, household sample, basic and expanded CURF (Confidentialised Unit Record File) combined. US and Canadian data include sample weights.

	USA 1995–2007						Canada 2001						Australia 2001						
	Years of education		Less than HS dip.		Bach. deg. or more		Years of education		Less than HS dip.		Bach. deg. or more		Years of education		Less than HS dip.		Bach. Deg. or more		
	Mean	Ratio	Ratio <sup>b</sup>	Ratio <sup>b</sup>	Ratio <sup>b</sup>	(N)	Mean	Ratio	Ratio <sup>b</sup>	Ratio <sup>b</sup>	Ratio <sup>b</sup>	(N)	Mean	Ratio	Ratio <sup>b</sup>	Ratio <sup>b</sup>	Ratio <sup>b</sup>	(N)	
<i>Age 50 and over</i>																			
<i>Immigrant generation</i>																			
White <sup>a</sup>	12.6	0.96	1.47	1.12	1.12	12,172	12.2	1.04	0.97	1.19	1.19	44,213	10.2	1.03	0.86	0.89	25,183		
Afro-Caribbean Black	11.6	0.88	2.17	0.73	0.84	2662	13.0	1.11	0.84	1.03	2491								
Chinese	12.1	0.92	2.10	1.37	1.11	1451	11.7	1.00	1.11	1.46	6535	10.5	1.05	0.75	1.97	1730			
South Asian	14.6	1.11	0.89	2.49	1.04	1041	12.5	1.07	0.94	2.01	4710	12.8	1.29	0.40	3.27	762			
Other Asian	12.7	0.97	1.43	1.48	1.15	5541	13.5	1.15	0.69	2.47	2818	11.1	1.12	0.63	2.56	1142			
Arab, ME, NA													9.4	0.95	0.91	1.19	958		
Mexican	7.4	0.56	4.58	0.16	0.16	6382													
Puerto Rican	9.9	0.75	3.46	0.33	0.33	2448													
Other Hispanic	10.7	0.81	2.72	0.63	0.63	6624													
Other visible minorities																			
Third and higher gen. White	13.1	1.00	[16.6]	[23.9]	[23.9]	188,156	13.0	1.12	0.82	1.88	3055	10.6	1.07	0.75	1.28	1670			
							11.7	1.00	[43.6]	[11.2]	124,279	9.9	1.00	[59.9]	[10.00]	47,733			
<i>Age 25–39</i>																			
<i>Second generation</i>																			
White <sup>a</sup>	14.3	1.03	0.89	1.20	1.20	8388	15.6	1.07	0.60	1.44	24,812	12.5	1.02	0.85	1.07	17,550			
Afro-Caribbean Black	13.9	1.00	1.45	1.02	1.02	857	16.1	1.10	0.47	1.28	702								
Chinese	15.9	1.15	0.40	2.39	2.41	241	17.5	1.20	0.23	2.94	812	14.3	1.17	0.29	3.06	152			
South Asian	16.4	1.18	0.15	2.52	2.02	202	17.6	1.21	0.28	2.70	607	13.9	1.14	0.32	2.49	91			
Other Asian	15.0	1.08	0.42	1.67	1.67	986	17.3	1.18	0.28	2.53	250	13.1	1.08	0.58	1.38	40			
Arab, ME, NA													12.4	1.02	0.67	1.01	395		
Mexican	12.9	0.93	2.59	0.47	0.47	2888													
Puerto Rican	12.8	0.92	2.88	0.39	0.39	1727													
Other Hispanic	14.2	1.03	1.11	1.15	1.15	1554													
Other visible minority																			
Third and higher gen. White	13.9	1.00	[7.2]	[31.6]	[31.6]	150,183	16.6	1.14	0.46	1.87	376	11.5	0.94	1.02	0.59	859			
							14.6	1.00	[17.4]	[19.2]	105,883	12.2	1.00	[34.2]	[18.1]	38,609			

Note: Omitted data results from categories not available in a particular data source. 'Other visible minorities' for Canada and Australia includes unavailable categories.

<sup>a</sup> Whites are non-hispanic for the US, non-visible minorities for Canada, and of European origins for Australia.

<sup>b</sup> Ratio to third-generation White of same age group (figure for that group is base percentage, in brackets).

**Table 2**  
Occupational status, by generation, age and origin, for the United States, Canada and Australia. Source: See Table 1.

	USA 1995–2007				Canada 2001				Australia 2001						
	Managerial and professional	Service and manual	Occup. status	Ratio <sup>b</sup> (N)	Managerial and professional	Service and manual	Occup. status	Ratio <sup>b</sup> (N)	Managerial and professional	Service and manual	Occup. status	Ratio <sup>b</sup> (N)			
<b>Age 50 and over</b>															
Immigrant generation															
White <sup>a</sup>	16.3	11.3	52.5	1.00	12,172	33.2	33.9	49.7	1.12	18,777	29.0	26.8	51.1	0.92	8976
Afro-Caribbean Black	13.8	26.1	43.8	0.83	2662	23.4	53.8	34.8	0.78	1508					
Chinese	14.6	15.3	49.6	0.94	1451	31.2	40.9	45.1	1.02	2792	34.0	25.6	54.2	0.97	659
South Asian	33.0	10.2	61.4	1.16	1041	28.6	48.5	40.1	0.90	2496	42.1	16.3	62.9	1.13	404
Other Asian	16.4	17.3	49.6	0.94	5541	27.5	49.7	38.9	0.88	1633	22.9	36.1	43.4	0.78	468
Arab, ME, NA											24.2	32.5	45.8	0.82	252
Mexican	4.1	22.1	41.0	0.78	6382										
Puerto Rican	6.8	14.2	46.3	0.88	2448										
Other Hispanic	8.9	18.8	45.0	0.85	6624										
Other VM					25.3		47.8	38.8	0.87	1644	29.5	33.6	47.9	0.86	434
Third and higher gen. White	18.5	13.0	52.7	1.00	188,156	28.6	39.8	44.4	1.00	58,457	34.8	23.7	55.6	1.00	18,978
<b>Age 25–39</b>															
Second generation															
White <sup>a</sup>	35.2	21.8	56.7	1.06	8388	33.6	35.2	49.2	1.15	23,009	28.5	21.3	53.6	1.00	13,392
Afro-Caribbean Black	29.5	28.2	50.7	0.95	857	31.1	42.0	44.5	1.04	640					
Chinese	59.3	10.0	74.6	1.39	241	50.3	25.1	62.6	1.46	757	50.0	14.2	67.9	1.27	134
South Asian	57.7	11.4	73.1	1.37	202	46.1	31.4	57.4	1.34	555	47.8	13.0	67.4	1.26	69
Other Asian	40.1	22.2	59.0	1.10	986	39.2	41.3	49.0	1.14	235	22.6	32.3	45.2	0.84	31
Arab, ME, NA											30.9	23.4	53.7	1.00	269
Mexican	20.2	31.0	44.6	0.83	2888										
Puerto Rican	17.9	29.8	44.0	0.82	1727										
Other Hispanic	34.4	26.6	53.9	1.01	1554										
Other VM					37.4		35.7	50.9	1.19	339	26.6	25.0	50.8	0.95	124
Third and higher gen. White	30.2	23.2	53.5	1.00	150,183	26.5	40.9	42.8	1.00	96,382	29.5	22.2	53.6	1.00	29,395

<sup>a</sup> Whites are non-hispanic for the US, non-visible minorities for Canada, and of European origins for Australia.

<sup>b</sup> Ratio to third-generation White of same age group.



**Table 3**  
Household incomes<sup>a</sup> adjusted for household size, by generation, age and origin, for the United States, Canada and Australia. Source: See Table 1.

	USA 1995–2007				Canada 2001				Australia 2001			
	Total household income	Household size	individual-equivalent <sup>d</sup> HH income	Ratio <sup>c</sup> (N)	Total household income	Household size	individual-equivalent <sup>d</sup> HH income	Ratio <sup>c</sup> (N)	Total household income	Household size	individual-equivalent <sup>d</sup> HH income	Ratio <sup>c</sup> (N)
<i>Age 50 and over</i>												
<i>Immigrant generation</i>												
White <sup>b</sup>	45,981	2.4	30,210	0.93	12,172	2.4	29,714	1.04	44,064	2.4	22,216	0.95
Afro-Caribbean	43,263	3.0	25,750	0.79	2662	3.1	27,469	0.96	2481	3.3	25,965	1.11
Chinese	49,717	3.1	28,694	0.88	1451	3.7	26,124	0.91	6520	3.3	30,065	1.28
South Asian	66,131	3.7	36,706	1.13	1041	4.2	28,562	1.00	4693	3.3	24,797	1.06
Other Asian	54,392	3.5	30,589	0.94	5541	3.8	28,070	0.98	2813	3.3	21,469	0.92
Arab, ME, NA												
Mexican	39,205	3.8	20,533	0.63	6382							
Puerto Rican	32,906	2.5	20,695	0.64	2448							
Other Hispanic	41,583	3.0	24,225	0.74	6624							
Other VM												
Third and higher gen. White	47,519	2.2	32,567	1.00	188,156	2.2	28,662	1.00	123,456	2.2	23,426	1.00
					47,223	3.5	25,715	0.90	3040	2.8	26,581	1.13
					42,689	2.2	28,662	1.00	123,456	2.2	23,426	1.00
<i>Age 25–39</i>												
<i>Second generation</i>												
White <sup>b</sup>	59,038	3.2	35,196	1.06	8388	3.2	32,978	1.11	24,767	2.9	30,210	1.01
Afro-Caribbean	49,282	3.4	28,411	0.86	857	3.2	28,875	0.97	701	3.0	36,453	1.22
Chinese	67,474	2.9	42,043	1.27	241	3.2	37,409	1.26	811	2.6	39,161	1.31
South Asian	62,813	2.8	40,435	1.22	202	3.6	33,105	1.12	603	2.6	35,518	1.18
Other Asian	62,539	3.1	37,727	1.14	986	3.1	34,271	1.16	250	2.6	28,907	0.96
Arab, ME, NA												
Mexican	50,028	3.9	27,067	0.82	2888							
Puerto Rican	46,381	3.5	25,827	0.78	1727							
Other Hispanic	57,391	3.3	33,429	1.01	1554							
Other VM												
Third and higher gen. White	56,013	3.2	33,107	1.00	150,183	3.2	30,251	1.02	375	2.6	30,825	1.03
					50,149	3.1	29,629	1.00	105,383	2.9	29,987	1.00
					52,153	3.1	29,629	1.00	105,383	2.9	29,987	1.00

<sup>a</sup> Incomes in the US data are inflated or deflated to 2001 values using the consumer price index; incomes in Canadian and Australian data are converted to US purchasing power parity equivalents (see text).

<sup>b</sup> Whites are non-hispanic for the US, non-visible minorities for Canada, and of European origins for Australia.

<sup>c</sup> Ratio to third-generation White of same age group.

<sup>d</sup> Household income divided by square root of number of persons in household.

**Table 4**

Concentration in metropolitan areas, by generation, age and origin, for the United States, Canada and Australia. Source: See Table 1.

	USA 1995–2007			Canada 2001			Australia 2001		
	Total, high-immigration cities	Ratio	(N)	Total, high-immigration cities	Ratio	(N)	Total, high-immigration cities	Ratio	(N)
<i>Age 50 and over</i>									
<i>Immigrant generation</i>									
White <sup>a</sup>	26.6	4.42	12,172	47.3	2.05	44,213	62.3	1.43	27,221
Afro-Caribbean Black	54.1	8.98	2662	80.1	3.47	2491			
Chinese	45.5	7.56	1451	81.2	3.52	6535	90.3	2.07	1808
South Asian	27.3	4.53	1041	72.8	3.15	4710	86.5	1.98	798
Other Asian	27.0	4.47	5541	68.9	2.98	2818	84.5	1.93	1214
Arab, ME, NA									
Mexican	22.4	3.71	6382				91.5	2.09	1008
Puerto Rican	45.2	7.49	2448						
Other Hispanic	54.2	8.99	6624						
Other VM				71.2	3.08	3055	73.7	1.69	925
Third and higher gen. White	6.0	1.00	188,156	23.1	1.00	124,279	43.7	1.00	50,731
<i>Age 25–39</i>									
<i>Second generation</i>									
White <sup>a</sup>	20.1	2.91	8388	45.1	1.86	24,844	62.8	1.32	17,739
Afro-Caribbean Black	46.6	6.77	857	78.8	3.26	702			
Chinese	38.9	5.65	241	72.2	3.00	812	87.9	1.85	157
South Asian	32.6	4.73	202	66.6	2.75	607	84.6	1.78	91
Other Asian	26.2	3.80	986	65.8	2.72	250	90.0	1.89	40
Arab, ME, NA							92.0	2.11	400
Mexican	17.2	2.50	2888						
Puerto Rican	37.7	5.47	1727						
Other Hispanic	39.0	5.67	1554						
Other VM				62.9	2.60	376	69.4	1.46	173
Third and higher gen. White <sup>a</sup>	6.9	1.00	150,183	24.2	1.00	105,883	47.6	1.00	38,937

<sup>a</sup> Whites are non-hispanic for the US, non-visible minorities for Canada, and of European origins for Australia. US high-immigration cities are New York, Los Angeles, Chicago, Washington, San Francisco, and Miami; Canadian high-immigration cities are Toronto, Montreal, and Vancouver; Australian high-immigration cities are Sydney, Melbourne, Brisbane, and Perth.

same as whites. Cross-national differences in educational attainment for the immigrant generation are eliminated for the second generation.

The first two columns of Table 1 for each country show mean years of education for each origins groups, and the ratios between these means and those for third and higher-generation whites. Because of the complex patterns of educational change across countries, the ratios are most meaningful. For immigrants in the US, these ratios are less than one for all groups except the South Asians. Mexicans have the lowest ratio, at 0.56, Puerto Ricans at 0.75, other Hispanic groups 0.81, Afro-Caribbean blacks 0.88 and Chinese 0.92. For immigrants in Canada, the ratios are all one (the case for the Chinese) or higher, and for Australia they are higher than one for all groups except the Arab, Middle eastern and North African group not separately identified for the other countries.

For the second generation, however, in all three countries the mean years of education ratios are one or greater for whites, Afro-Caribbean Blacks, Chinese, South Asians, and other Asians. The Chinese and South Asian groups have particularly high numbers. Table 1 shows that in the US the Chinese second generation averages 15.9 years of education, compared to 13.9 years in the corresponding mainstream population. In other words, the Chinese second generation average is about 15% above the level in the mainstream population (reflected in the ratio shown as 1.15). In Canada the Chinese second generation averages 17.5 years of education which is 20% above the level in the corresponding mainstream population of 14.6 years, and in Australia they average 14.3 years of education, 17% above the mainstream average of 12.2 years. For South Asians the comparisons are quite similar; the same is true for 'other Asians' in Canada and nearly true for that category in the US and Australia.

So based on years of education, for all groups where comparisons are possible, differences in disadvantage in the immigrant generation are largely eliminated in the second generation. Exceptions to the pattern of high attainment are the Mexicans and Puerto Ricans who have significant representation only in the US. These groups nevertheless have higher educational levels than had their immigrant parents. Another exception is the group of Arab, Middle Eastern or North African origins in Australia, another group that cannot be directly compared cross-nationally in these data. They were less educated compared to the mainstream. They also experience some upgrading.

The third and fourth columns for each country in Table 1 focus on qualifications at two levels, high school completion, and bachelor's degree attainment. The comparative patterns are similar to what was seen for mean years of education. In the second generation, whites, Afro-Caribbean Blacks, Chinese, South Asians and other Asians all have bachelor's degree

**Table 5**

Regression of individual-equivalent household income<sup>a</sup> by origin, second generation ages 25–39, compared to third-generation Whites 25–39. Source: See Table 1.

	US 1995–2007			Canada 2001			Australia 2001 <sup>b</sup>		
	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)
Constant	33,107***	27,152***	15,400***	29,629***	26,770***	21,052***	29,987***	26,060***	23,036***
White second generation	2090***	372**	–122(ns)	3295***	1277***	445***	96(ns)	–1209***	–1450***
Afro-Car. Black sec. gen.	–4695***	–8292***	–6372***	–755***	–4816***	–4255***			
Chinese second generation	8936***	5295***	981(ns)	7779***	4115***	1156(ns)	6463***	2707*	–1812***
South Asian second gen.	7329***	4161***	–1559*	3475(ns)	–117(ns)	–2210***	9117***	5867***	1309(ns)
Other Asian second gen.	4620***	1942***	–291(ns)	4641(ns)	1044(ns)	–711(ns)	5298*	1142(ns)	172(ns)
Arab, ME, NA second gen.							–1069*	–6376***	–6692***
Other VM second generati	–4781***	–7178***	–4150***	648**	–2837***	–3677***	751(ns)	–1355*	–3019*
Sex * marital status (ref = married male)									
Married female			–148(ns)			–520***			–424*
Not married male			2828***			107(ns)			4251***
Not married female			–3605***			–3624***			157(ns)
Age			157***			277***			–504***
Age squared			–6***			–15***			9(ns)
Education (ref = less than HS diploma)									
High school diploma			8311***			3981***			6325***
Some post-secondary no certificate			11,371***			5203***			
Post-secondary certificate			14,089***			7328***			6333***
Bachelors degree			20,043***			13,504***			15,760***
Post-bachelors degree			23,075***			15,125***			17,469***
City (ref = not in a CMA)									
New York, Toronto, Sydney		12,315***	8121***		9371***	7565***		10,787***	8596***
Los Angeles, Montreal, Melbourne		11,340***	8530***		3452***	2386***		7838***	5625***
Chicago, Vancouver, Brisbane		13,656***	9981***		6567***	5336***		5066***	3529***
Washington, . . . , Perth		15,939***	10,754***					4440***	2110***
San Francisco		15,401***	10,429***						
Miami		11,024***	6182***						
Other CMA		7426***	5353***		4669***	3478***		2252***	1259***
R <sup>2</sup>	0.005	0.058	0.212	0.009	0.050	0.146	0.006	0.058	0.186
N	172,107	172,107	172,107	133,255	133,255	133,255	54,798	54,798	54,798

Note: Significance tests are approximations; see text. (ns) = not significant at  $p = .05$  level

<sup>a</sup> Incomes in the US data are inflated or deflated to 2001 values using the consumer price index; incomes in Canadian and Australian data are converted to US purchasing power parity equivalents (see text).

<sup>b</sup> Australian data are averaged from separate analyses in basic and extended files each available as a Confidentialised Unit Record File (CURF).

\*  $p < .05$ .

\*\*  $p < .01$ .

\*\*\*  $p < .001$ .

**Table 6**

Household incomes (individual equivalent) of second generation origins groups relative to mainstream population, ages 25–39, for the US, Canada, and Australia (based on regression results in Table 5).

	Eq. (1): Origins only			Eq. (2): Urban area controls			Eq. (3): Urban area and human capital controls		
	US	Canada	Australia	US	Canada	Australia	US	Canada	Australia
White	0.06***	0.11***	0.00 (ns)	0.01**	0.04***	–0.04***	0.00(ns)	0.02***	–0.05***
Afro-Caribbean Black	–0.14***	–0.03***		–0.25***	–0.16***		–0.19***	–0.14***	
Chinese	0.27***	0.26***	0.22***	0.16***	0.14***	0.09*	0.03(ns)	0.04(ns)	–0.06***
South Asian	0.22***	0.12(ns)	0.30***	0.13***	–0.00*	0.20***	–0.05*	–0.07***	0.04(ns)
Other Asian	0.14***	0.16(ns)	0.18*	0.06***	0.04(ns)	0.04 (ns)	–0.01(ns)	–0.02(ns)	0.00(ns)
Arab, M. East, No. Af.			–0.04*			–0.21***			–0.22***
Other minority	–0.14***	0.02**	0.03 (ns)	–0.22***	–0.10***	–0.05*	–0.13***	–0.12***	–0.10***

Note: Table entries are ratios of metric regression coefficients for effects of origins on individual-equivalent household incomes to overall mainstream means. Sample includes second generation of all origins and mainstream mean consisting of white persons of third and higher generations, ages 25–39. Eq. (2) includes dummy variables for each of the high-immigration cities listed in Table 4. Eq. (3) includes in addition variables for education (high school diploma, some post-secondary, post-secondary certificate, bachelor's degree, and post-bachelor's degree), age (with quadratic), gender, and marital status. Significance tests are approximations; see text. (ns) = not significant at  $p = .05$  level

\*  $p < .05$ .

\*\*  $p < .01$ .

\*\*\*  $p < .001$ .

attainment ratios greater than one. For Chinese and South Asians, the rates of bachelor's degree attainment rates are more than double the rates for mainstream whites in each country. Other Asians also have very high bachelor's degree attainment

rates. For these groups also the rates of high school dropout are lower than the mainstream, with the sole exception of Afro-Caribbean blacks in the US.

Overall, educational attainments for Afro-Caribbean blacks in the US and Canada are less spectacular than for Asians, but it is worth underscoring that in these comparisons they compare well with those in the mainstream population of the same age. Whether the measure is years of education, or bachelor's degree attainment, second-generation Afro-Caribbean's in both countries have done as well or better than the same-age mainstream population in both countries. The numerical ratios are slightly higher in Canada, although the improvement in education ratios compared to the immigrant generation is greater in the US. Note that in the US the Afro-Caribbean second generation has a somewhat higher relative proportion not completing high school compared to the mainstream; however in absolute terms the rates are still quite low – less than 10%.

Generally the other minorities have educational attainments at or somewhat above that of the mainstream populations in all three countries, with the exception of Mexicans and Puerto Ricans in the US (which have lower educational attainments compared to the mainstream in the US, with fewer years of education, fewer high school completions and substantially fewer bachelor's degrees), and the other visible minorities in Australia.

#### 4.2. Occupational status

Table 2 shows that the high educational attainments of the second generation to a significant extent result in high occupational status. High occupational status is reflected in higher proportions of persons with occupations in the professional and managerial categories, and fewer in the service and manual categories. Occupational status is here summarized in a simple and very crude occupational status score (based on professional and managerial = 100, service and manual = 0, and other = 50). If all members of a group were employed in managerial or professional occupations, the status score would be 100; if all were employed in service and manual occupations, the score would be 0. The ratio for these scores to those for the mainstream population reflects relative occupational status.

Occupational attainment ratios for second-generation whites in Canada are somewhat higher relative to the mainstream than for the US and Australia. However, reflective of their higher levels of post-secondary education, the occupational attainments for second generation Chinese and South Asians were much higher compared to the mainstream in all three countries. Their proportions in managerial and professional occupations are double (or close to double) that of the mainstream population of the same age, and the proportions in service and manual occupations are around half that of the mainstream population. The occupational status scores are in the range of 20 to 40% higher than the mainstream in all three countries. For other Asians, there appears to be a significant cross-national difference: those in Canada and the US have relatively high occupational status (albeit not as high as for the Chinese and South Asians), those in Australia relatively low.

On the other hand, for the Afro-Caribbean second generation the occupation attainments are near to the mainstream populations; the occupational status ratios are somewhat higher in Canada (1.04) compared to the US (0.95). In both countries, the Afro-Caribbean second generation has a somewhat lower relative occupational status than what might have been expected based on their relative educational attainment, which in both cases was higher than the mainstream standard (ratios for years of education and proportions with bachelor's degrees greater than one). Occupational status scores are near to the mainstream standard for second generation 'other Hispanic' groups in the US, and for Arab, Middle Eastern and North African and other groups of non-European origins in Australia. The relatively lowest status scores are seen for Mexicans and Puerto Ricans in the US.

#### 4.3. Household incomes and economic well-being

The economic status of second generation Chinese, Asian and other Asian groups is higher than for the mainstream population in the same age group in all three countries. In Table 3, the first column for each country shows mean household income by origin group. We focus attention on comparisons with the mainstream populations, where for those aged 25–39 average household incomes were about \$56,000 in the US, \$50,000 in Canada, and \$47,000 in Australia. Average household incomes for both the Chinese and South Asian second generation were several thousand dollars above the mainstream mean in each country. For the Chinese, the figures were over \$67,000 in the US, nearly \$63,000 in Canada, and nearly \$57,000 in Australia; for South Asians, the figures were nearly \$63,000 in the US, nearly \$60,000 in Canada, and nearly \$59,000 in Australia. Note that for the Chinese, household incomes for the immigrant generation were significantly lower relative to the mainstream for those in the US compared to Canada and Australia, so the education-driven mobility for the Chinese second generation eliminates the cross-national difference experienced by the immigrants. (Note that the incomes of the older immigrant populations are based on contemporary circumstances, and many in the parental generation may have experienced significant mobility since the time when they were raising their second generation offspring.<sup>6</sup>) Lower household incomes are evident for second generation Afro-Caribbeans in the US and Canada, for the Mexicans and Puerto Ricans in the US, and the Arab and Middle Eastern groups in Australia.

<sup>6</sup> Some findings (Antecol et al., 2006) suggest that earnings growth has been greater for immigrants in the United States compared to Canada and Australia, and if so the cross-national comparisons of contemporary household incomes for the parental generation here may not reflect differences in household incomes during the childhood years of the second generation.

The impact of household income on individual economic status and well-being depends on the size and composition of the household, and these vary by immigrant status, ethnic origins, and country of residence. However, differences in household size between the various second generation groups and the mainstream population are not large. This can be seen in the second column in Table 3 for each country. Mean household size for the mainstream population aged 25–39 is 3.2 in the US, 3.1 in Canada, and 2.9 in Australia; most second generation groups vary little from their respective country average. The main exception is second-generation Mexicans in the US, where household sizes average 0.7 higher than the mainstream. All other groups deviate by an average of 0.5 persons or less. Hence, the adjustment for household size should not be expected to alter in any major way the above description of ethnic differences based on total household income, or the cross-national similarities that were noted.

To calculate 'individual-equivalent household income,' we use a scale based on household income divided by the square root of household size.<sup>7</sup> Mean individual-equivalent household incomes for each group, and their ratio to the mean for the mainstream population, are presented in the third and fourth columns of Table 3 for each country. The relatively high economic status for Chinese, South Asians and other Asians is confirmed in this analysis. In each case the ratio is well above unity. Note that since the South Asian second generation in Canada has somewhat larger household sizes compared to their counterparts in the US and Australia (possibly related to the larger proportion of Pakistani Muslims), its individual-equivalent household incomes are relatively lower as a result. As expected, individual-equivalent household incomes are nearer to parity for whites, below parity for Afro-Caribbeans, and significantly lower in the US for Mexicans and Puerto Ricans. The results for the white and Afro-Caribbean second generation groups show somewhat lower relative incomes in the US compared to Canada; this was not the case for Chinese or South Asians.

#### 4.4. Immigrant and second generation metropolitan concentration

Immigrants tend to settle in key metropolitan areas for all three countries, and to a considerable extent their second generation offspring tend to remain in these same cities. The data in Table 4 show the proportions of immigrants (aged 50 and older) and the second generation (aged 25–39) who reside in one of six high-immigration cities in the US (New York, Los Angeles, Chicago, Washington, San Francisco and Miami), in one of three in Canada (Toronto, Montreal and Vancouver), and in one of four in Australia (Sydney, Melbourne, Brisbane, and Perth). The extent of over-representation of immigrants in these cities is shown by the ratio of these proportions to that of the corresponding mainstream population age group, given in the second column of the table for each country. In the US, immigrant Afro-Caribbean blacks are nearly nine times more concentrated in one of the six urban areas than is the mainstream population, and the second generation is concentrated in the same urban areas by a factor of about 6.8. For Afro-Caribbean blacks in Canada the figures are 3.5 and 3.3. For Chinese in the US, immigrants are over-concentrated in the six urban areas by a factor of 7.6, and the second generation by a factor of 5.6. For the Chinese in Canada the figures are 3.5 and 3.0, respectively, and for Chinese in Australia, 2.1 and 1.8. Urban concentration ratios are lower for Canada and Australia, because in those countries most or all of the largest cities contain significant immigrant and second generation populations, whereas in the US, although immigrant cities are among the largest in the country, there are also many other large cities which have relatively few immigrants.

For the second generation, their continued residence in high-immigration cities means that their mainstream labour market competition comes primarily from the third- and higher-generation white population within those particular urban areas, just as for their immigrant parents. Educational and income levels for mainstream populations in these urban areas tend to be high, particularly in the US, so it is important to include urban area of residence in the comparative analysis for the second generation, as we do in the regression analyses to follow.

#### 4.5. Regression analyses of economic well-being

How do ethnic differences in the economic status of the second generation depend on ethnic variations in educational attainments, and on residence in major urban areas? Regression analyses presented in Tables 5 and 6 address these issues, focusing on the second generation origins groups compared to mainstream whites in the age range 25–39. The regression is structured in a manner analogous to human-capital analysis of employment earnings, which normally includes educational attainment and urban area of residence as independent variables, and also age, gender and marital status. Here the dependent variable is individual-equivalent household incomes as analyzed in Table 3. Human capital factors are included as independent variables not only because they affect individual employment income, but also because they affect many other determinants of household income. For example, higher levels of educational attainment not only lead to higher individual employment incomes, they may also lead to residence in households in which other members are also highly educated, and hence have greater employment opportunity. As well, urban residence is likely to affect the incomes of all employed household members. (One might usefully add variables related specifically to household composition, such as the number of earners in the household, or the generational status of other household members; these variables were not available.)

<sup>7</sup> Various scales are available to adjust household incomes for the impact of household size on economic-well being. This particular scale based on the square root of household size is in common use, for example in OECD publications (see Whiteford and Adema, 2007, p. 12).

In Table 5, regression Eq. (1) includes only origins groups and so origins coefficients represent group differences basically the same as the mean values in Table 3. Regression Eq. (2) includes also metropolitan areas, and so the origins coefficients indicate how minority groups fare within categories by area of residence. Regression Eq. (3) includes also education, and as well gender, marital status, and age (including a quadratic term). Table 6 presents the metric coefficients for the second generation origins groups as a proportion of the average mainstream individual-equivalent household income.<sup>8</sup> Reported significance levels in the US and Canadian data are computed from weighted samples, with weights scaled to maintain total sample sizes. Note also that since the two Australian samples cannot be merged, results from the two samples – quite similar in most details – are averaged across the two files (for a discussion of statistical considerations in combining surveys, see Roberts and Binder, 2009), with reported statistical significance reflecting the results in the separate analyses.<sup>9</sup>

In all cases, the second generation advantage is reduced considerably when account is taken of urban concentration (comparing Eqs. (1) and (2) in each country), and in some cases becomes a disadvantage. This is because within urban areas where most second generation persons reside, the third-generation whites have higher average educational levels than across their respective nations as a whole. For whites within urban areas, the second generation advantage is negligible in the US, slightly positive in Canada; whites have a slight disadvantage in Australia. For Afro-Caribbeans, the position is negative in both the US and Canada, somewhat less so in Canada. The position of the Chinese second generation is consistently positive in each country, and for South Asians it is positive in the US and Australia though not in Canada. The position of the residual Asian category is positive in all countries, particularly in the US. The overall position of all other minorities is negative in each country.

Human capital explains many of these group differences net of urban area in each country. For the white second generation, the small differences are mostly unaffected by human capital controls. The Afro-Caribbean second generation in Canada and the US has the most negative experience translating human capital into economic success within urban areas; their incomes net of human capital are about 19% below the mean incomes in the US and 14% below in Canada (see Table 6). The Chinese, South Asians and other Asians, by contrast and like whites, have incomes much closer to the mainstream group average after human capital controls in each country. The greatest variations are for the South Asian second generation in Canada, whose incomes are 7% below the mainstream average, and the Chinese in Australia whose incomes are 6% below.<sup>10</sup>

High educational attainment in many second generation minority groups may reflect labour market incentives that are roughly comparable across groups even if there are overall earnings disparities. A further analysis explored whether the economic benefits of bachelor's and post-graduate educational attainments might vary among origins groups. Education-origins interaction terms were added to the regressions equations reported in Table 5 (results available from the authors on request). Attainment of a BA or higher post-graduate degree has a more positive economic benefit for the Afro-Caribbean second generation in the US, compared to second generation or mainstream whites. These greater returns somewhat alleviate overall disadvantage for the best-educated Afro-Caribbean second generation, implying also that net disadvantage is greater for the least educated. A similar pattern is seen for the black Afro-Caribbean second generation in Canada and also for the residual, mostly Hispanic, minority group in the US. For most other groups, including those with very high levels of education, particular the Chinese, returns to bachelors and post-graduate education do not differ significantly from what is observed for the mainstream groups in any of the three countries. Although these results should be treated with caution because of limited sample sizes, it seems justified to conclude that economic disadvantage for the second generation is not necessarily more extreme for those with higher levels of education. In some cases, employers who do consider minority employees may be most willing to consider those who are native-born and possess advanced degrees. Whether these persons ultimately break through income and promotion ceilings as they move through later stages in their careers will become clear as data on older second generation persons become available in the future.

Overall, then, we can say that the income experience of the second generation compared to the mainstream population is highly variable by group, but not hugely different among the three countries. There are some group-specific differences, with the three Asian categories doing somewhat better in the US, but otherwise they are mostly similar across countries.

## 5. Discussions and conclusion

The overall conclusion is that cross-national differences in immigrant success across countries are largely eliminated for the second generation. In the second generation the success of Asians is common across countries. The difficulties of Afro-Caribbean blacks and to some extent other minorities is also common. Institutional processes affecting the relative status of

<sup>8</sup> The entries in Table 6 are ratios of metric regression coefficients for effects of origins on individual-equivalent household incomes to mainstream means (negative ratios reflect negative coefficients). For previous examples applied to minorities in the US using proportions to compare unlogged income coefficients in different subsamples, see Tienda and Lii (1987, pp. 148 and 158), following the methodological discussion by Hodson (1985).

<sup>9</sup> Multiple subsample replication (or "bootstrapping") as a formal method for assessment of statistical significance (see Finifter, 1972; Stine, 1989; Efron and Tibshirani, 1993) is relevant here, but because of its complexity has not been applied. A key piece of information is the distribution for statistics produced from multiple subsamples, and in the case of Australia it may be noted that results of analyses in the two samples while not identical are similar, giving confidence in their overall statistical reliability. The difference between respective coefficient estimates varies from about 1% of overall mean earnings for whites and Chinese (two second generation groups with the largest samples), up to 15–18% of overall mean earnings for South Asians, and between 5–10% for other minorities.

<sup>10</sup> Note in the Australian results the negative effect of age on individual equivalent household income. This arises because for those in the age range 25–39, household income rose only slightly with age, however household sizes increased significantly with age so individual equivalent household incomes fell.

minorities are largely unaffected by the variations in education and household income for the parental generation, so there is little 'carry-over' effect of relative economic standing. Some degree of minority status carry over is associated with levels of education of the parental generation, but not the implication that their relative education had for income levels. Institutional differences among the countries which affected the immigrant parents appear not to affect their offspring in the same way. In particular, educational institutions in the US, which by creating high levels of education in the mainstream population erected barriers to economic success for immigrants, appear to provide compensatory opportunities for their offspring.

Our findings suggest that Chinese, South Asian, and Afro-Caribbean immigrant offspring experience consistent upward inter-generational mobility. They often match or out-perform their third-generation white peers in educational and employment achievement. South Asian immigrants already had high levels of education, with resulting occupational and income success, and this carried forward to advantage the second-generation. The success of the Chinese second-generation is notable, especially since the first-generation were less well educated, worked in less skilled occupations, and earned less in most locations than the third-generation whites of their age.

Overall, the success of some second-generation ethnic groups in the US is quite remarkable, considering that the parental generation did not do as well in the US compared to Canada and Australia, especially among Chinese and Afro-Caribbean black immigrants. Immigrants face the lowest entry status in the US, compared to Canada and especially Australia (Reitz, 1998). Second-generation Chinese and South Asians in the US seem to have overcome obstacles of high levels of third-generation white education, limited social welfare benefits, and of course the poor employment realities of the parental first-generation. In fact, the success of some groups such as South Asians in particular is less in Canada, particularly after adjustments for urban area and human capital, compared to their counterparts in the US (or in Australia).

These findings have significant implications. First, low income and poverty levels such as have been observed in the past for Afro-Caribbean, Chinese, South Asian and other Asian immigrant groups in the US do not appear to represent a major obstacle to upward mobility for the children of these immigrants. This may suggest that the current and on-going decline in immigrant economic success for Canada may not carry immediate consequences for the next generation in the future.

Beyond this, the findings raise the question of why inter-generational inheritance of social class position does not apply to these immigrants. The generally high educational levels of the immigrant groups in question may be part of the explanation. Highly educated immigrant parents may impart the value of education to their children, and devote energy to ensure their children are successful perhaps in part to compensate for their own employment difficulties. The children themselves, having been born and raised in the host society, have little difficulty with language, a factor shown to hold back more recently-arrived immigrant children (Sweetman, 2010).

Regarding the expectations based on segmented assimilation theory, there is some but fairly weak confirmation. The Afro-Caribbean second generation in both the US and Canada has educational levels fairly close to that of their third-generation white peers, and somewhat lower economic outcomes. A close look suggests that in the US, there is somewhat greater inequality for the Afro-Caribbean group compared to their counterparts in Canada, with a slightly larger proportion dropping out of high school, and relatively more entering low status occupations. Under-sampling of blacks in the US, particularly those with low incomes, may be an issue in considering these findings, despite compensatory weighting.<sup>11</sup> Segmented assimilation may be one reason for the cross-national difference for Afro-Caribbean group, but further analysis and more data would be required to substantiate such a conclusion. The overall economic position of the Afro-Caribbean second generation in the US is somewhat below that of its counterpart in Canada, which is consistent with expectations based on segmented assimilation. However, the cross-national comparison does not show downward mobility for the Afro-Caribbean group in the US; in fact taking account of the position of the immigrant generation in each country, there is evidence of greater upward mobility for Afro-Caribbean blacks in the US compared to their counterparts in Canada. In any case, the general position of the Afro-Caribbean group in the two countries is quite similar compared to the other groups. As well, higher rates of return to bachelors and post-graduate education for Afro-Caribbean black second generation in the US and Canada indicate incentives in the labour market supporting their mobility aspirations. Overall, these findings provide only weak support for 'segmented assimilation' whereby the offspring of Afro-Caribbean immigrants in the US integrate within the black underclass and experience downward mobility. This may occur in some cases, but the net impact appears quite small across the entire population.

Cross-national comparisons can clarify important issues, but are difficult and our results show certain shortcomings. Larger samples would enable examination of individual economic outcomes in greater detail, and allow us to place greater confidence in the reliability of cross-national differences. Greater consistency in variable definitions, including definitions of origins groups, would be helpful, though difficult to achieve without international collaboration and cooperation. Hopefully future studies will include data across generations to allow analysis of true inter-generational mobility rather than the comparisons of cohorts at a single point in time as has been done here. Extension of these comparative analyses to include the second generation in other countries, such as is being undertaken in western Europe by the project on The Integration of the European Second Generation (known as 'TIES,' see early results comparing Amsterdam and New York in Crul and Holdaway, 2009) offers significant potential for expanding our understanding of the experiences of the children of immigrants.

<sup>11</sup> Ewert et al. (2010) find that data sources that do not include the incarcerated populations, such as the CPS, may underestimate the high school dropout rate for blacks in the US by as much as 40%. However, according to Kasinitz et al. (2008), second generation Afro-Caribbeans in New York have a much lower incarceration rate compared to the native-born African American population generally.

## Acknowledgments

Financial support for this study was provided by the lead author's Social Sciences and Humanities Research Council (SSHRC) grant. Earlier drafts were presented at a conference on "The Economics of Immigration: Children of Immigrants and Temporary Migration," held at Simon Fraser University, Vancouver, May 11–12, 2009, and at the American Sociological Association Annual Meeting in San Francisco, August 8–11, 2009. The collaboration of Jock Collins and Christine Inglis in arranging access to the Australian census data is acknowledged with thanks.

## References

- Alba, R., Lutz, A., Vesselinov, E., 2001. How enduring were the inequalities among European immigrant groups in the US? *Demography* 38, 349–356.
- Antecol, H., Cobb-Clark, D., Trejo, S., 2003. Immigration policy and the skills of immigrants to Australia, Canada, and the United States. *Journal of Human Resources* 38, 192–218.
- Antecol, H., Kuhn, P., Trejo, S.J., 2006. Assimilation via prices or quantities? sources of immigrant earnings growth in Australia, Canada, and the United States. *Journal of Human Resources* 41 (4), 821–840.
- Attewell, P., Kasinitz, P., Dunn, K., 2010. Black Canadians and black Americans: racial income inequality in comparative perspective. *Ethnic and Racial Studies* 33 (3), 473–495.
- Australian Bureau of Statistics, 2003. Census of Population and Housing. Household Sample File 2001. Technical Paper. ABS, Canberra.
- Aydemir, A., Sweetman, A., 2008. First- and second-generation immigrant educational attainment and labor market outcomes: a comparison of the United States and Canada. *Research in Labor Economics* 27, 215–270.
- Borjas, G., 1988. International Differences in the Labor Market Performance of Immigrants. W.E. Upjohn Institute for Employment Research, Kalamazoo.
- Borjas, G., 1990. Friends or Strangers: The Impact of Immigrants on the US Economy. Basic Books, New York.
- Borjas, G., 1994. Long-run convergence of ethnic skill differential: the children and grandchildren of the great migration. *Industrial and Labor Relations Review* 47, 553–573.
- Boyd, M., 2002. Educational attainments of immigrant offspring: success or segmented assimilation? *International Migration Review* 36 (4), 1037–1061.
- Corak, M., 2008. Immigration in the long run: the education and earnings mobility of second generation Canadians. *IRPP Choices* 14 (13), 4–30.
- Crul, M., Holdaway, J., 2009. Children of immigrants in schools in New York and Amsterdam: the factors shaping attainment. In: Crul, M., Holdaway, J., Roberts, C. (Eds.), *Educating Immigrant Youth: Pathways to Employment and Citizenship in International Perspective*. Teachers College Record (Special Issue).
- Efron, B., Tibshirani, R.J., 1993. *An Introduction to the Bootstrap*. Chapman and Hall, New York.
- Ewert, S., Pettit, B., Sykes, B., 2010. The Degree of Disadvantage: Incarceration and Racial Inequality in Education, University of Washington, Unpublished Manuscript, February 12.
- Farley, R., Alba, R., 2002. The new second generation in the United States. *International Migration Review* 36 (3), 669–701.
- Fernandez-Kelly, P., Portes, A. (Eds.), 2008. Exceptional outcomes: achievement in education and employment among children of immigrants. *The Annals of the American Academic of Political and Social Science* 620 (November).
- Finipter, Bernard M., 1972. The generation of confidence: evaluating research findings by random subsample replication. In: Costner, Herbert L. (Ed.), *Sociological Methodology*. Jossey-Bass, San Francisco.
- Foner, N., 2003. Immigrants and African Americans: comparative perspectives on the New York experience across time and space. In: Reitz, J.G. (Ed.), *Host Societies and the Reception of Immigrants*. Center for Comparative Immigration Studies, La Jolla, CA, pp. 45–71.
- Hodson, R., 1985. Some considerations concerning the functional form of earnings. *Social Science Research* 14, 374–394.
- Inglis, C., Model, S., 2007. Diversity and mobility in Australia. In: Heath, A.F., Cheung, S.I., Smith, S.N. (Eds.), *Unequal Chances: Ethnic Minorities in Western Labor Markets*. Oxford University Press, pp. 45–101.
- Kasinitz, P., Mollenkopf, J., Waters, M., 2008. *Inheriting the City: The Children of Immigrants Come of Age*. Harvard University Press, Cambridge MA.
- Organization for Economic Cooperation and Development (OECD), 2010. *Education at a Glance 2010: OECD Indicators*. OECD, Paris.
- Pendakur, K., Pendakur, R., 2002. Colour my world: have earnings gaps for Canadian-born ethnic minorities changed over time? *Canadian Public Policy* 28 (4), 489–512.
- Portes, A., Rumbaut, R., 2001. *Legacies: The Story of the Immigrant Second Generation*. Russell Sage Foundation, New York.
- Portes, A., Zhou, A., 1997. The new second generation: segmented assimilation and its variants. *Annals of the American Academy of Political and Social Sciences* 530, 74–96.
- Portes, A., Zhou, M., 1996. Self-employment and the earnings of immigrants. *American Sociological Review* 61, 219–230.
- Reitz, J.G., 1998. Warmth of the Welcome: The Social Causes of Economic Success for Immigrants in Different Nations and Cities. Westview Press, Boulder.
- Reitz, J.G., 2001a. Immigrant success in the knowledge economy: institutional change and the immigrant experience in Canada, 1970–1995. *Journal of Social Issues* 57 (3), 579–613.
- Reitz, J.G., 2001b. Terms of entry: social institutions and immigrant earnings in American, Canadian, and Australian Cities. In: Cross, M., Moore, R. (Eds.), *Globalization and the New City: Migrants, Minorities, and Urban Transformations in Comparative Perspective*. Houndmills, Basingstoke, pp. 50–81.
- Reitz, J.G., 2003. Educational expansion and the employment success of immigrants in the United States and Canada, 1970–1990. In: Reitz, J.G. (Ed.), *Host Societies and the Reception of Immigrants: Institutions, Markets and Policies*. Center for Comparative Immigration Research, University of California, San Diego, CA, pp. 151–180.
- Reitz, J.G., Somerville, K., 2004. Institutional change and emerging cohorts of the 'new' immigrant second generation: implications for the integration of racial minorities in Canada. *Journal of International Migration and Integration* 5(4, Fall), 385–415.
- Reitz, J.G., Zhang, Y., 2011. National and urban contexts for integration of the immigrant second generation in the United States and Canada. In: Alba, R., Waters, M. (Eds.), *The Next Generation: Immigrant Youth in a Comparative Perspective*. New York University Press, pp. 207–228.
- Roberts, G., Binder, D., 2009. Analyses Based on Combining Similar Information from Multiple Surveys. Paper Presented at the Survey Research Methods Section of the Joint Statistical Meetings (JSM), Washington, DC. <<http://www.amstat.org/sections/srms/Proceedings/y2009/Files/303934.pdf>>.
- Statistics Canada, 2006. 2001 Census of Canada, Public Use Microdata File, Individuals File, User Documentation, Statistics Canada, Ottawa. Catalog No. 95M0016XCB.
- Stine, R., 1989. An introduction to bootstrap methods: examples and ideas. *Sociological Methods and Research* 18, 243–291.
- Sweetman, A., 2010. Immigrant children in elementary school: an international perspective. In: McDonald, Ted, Ruddick, Elizabeth, Sweetman, Arthur, Worswick, Christopher (Eds.), *Canadian Immigration: Economic Evidence for a Dynamic Policy Environment*, McGill Queen's University Press, Queen's Policy Studies Series, Montreal and Kingston, pp. 257–281.
- Sweetman, A., Dicks, G., 1999. Education and ethnicity in Canada: an intergenerational perspective. *Journal of Human Resources* 34, 668–696.
- Tienda, M., Lii, D., 1987. Minority concentration and earnings inequality: Blacks, Hispanics, and Asians compared. *American Journal of Sociology* 93, 141–165.
- United States Bureau of the Census, 2006. Design and Methodology, Current Population Survey. Technical Paper 66, October. US Bureau of the Census, Washington.



- Whiteford, P., Adema, W., 2007. What Works Best in Reducing Child Poverty: A Benefit or Work Strategy? OECD Social, Employment and Migration Working Papers No. 51. Organization for Economic Cooperation and Development, Directorate for Employment, Labour and Social Affairs, Paris.
- Zhou, M., 1997. Segmented assimilation: issues, controversies, and recent research for the new second generation. *International Migration Review* 31, 975–1008.