



Citizenship and
Immigration Canada

Citoyenneté et
Immigration Canada

An educational portrait of postsecondary educated immigrants, 2006 Census

Li Xue and Li Xu

September 2010



Canada

The views and opinions expressed in this document are those of the author(s) and do not necessarily reflect those of Citizenship and Immigration Canada or the Government of Canada.

Acknowledgement

The authors wish to acknowledge and thank Eden Crossman, Research and Evaluation Branch for her significant contribution to the final report.

Ci4-92/2012E-PDF
978-1-100-21237-1
Ref. No.: RR20120703

Table of contents

Executive summary	ii
Introduction	1
Section 1: Demographic and educational profiles of immigrants vs. the Canadian-born.....	3
Section 2: Highest level of educational attainment, location and field of study of PSE immigrants.....	8
Highest level of educational attainment	8
Major field of study	11
Location of the highest education.....	18
Conclusion	26
Appendix A: Filipino immigrants and Live-In Caregiver Program	27

Executive summary

This paper takes advantage of the first available information on location of highest education in the 2006 Census to draw a detailed educational portrait of postsecondary educated (PSE) immigrants. This study is the first part of a three part project using the 2006 Census micro data to examine interplaying associations between labour market outcomes and educational characteristics among PSE immigrants. It is mainly descriptive. The second part of this project will explore employment and occupational outcomes by educational characteristics, the main focus being on the transferability of foreign degrees by field of study and country of highest post secondary degrees. A third investigation using multivariate analyses will separate out independent effects of country of study and field of study on occupational outcomes and earnings, controlling for other socio-demographic factors.

Drawing upon the newly available information captured in the 2006 Census, this study looks at statistical variations in country of highest educational attainment and field of study among PSE immigrants. This paper examines the following research question: What is the picture of postsecondary degree holders in terms of field of study and place of the highest degree among various immigrant groups? The study is comprised of two main sections – first, a comparison of immigrant and Canadian-born demographic and educational profiles, and second, an examination of highest level of educational attainment, location and field of study of PSE immigrants. What follows are selected highlights from the results of this analysis:

Demographics: immigrants compared to the Canadian-born

- Of the 4,076,705 immigrants enumerated in the 2006 Census between the ages of 25 and 64 years, 70% were established immigrants (those who had been in Canada for more than 10 years), 14% were recent immigrants (those who landed in Canada during 1996-2000), and 17% were very recent immigrants (those who landed in Canada after 2000).
- Compared to the Canadian-born population, immigrants had a higher share of females and were older. While older individuals aged 55-64 were over represented among established immigrants, recent immigrants and very recent immigrants were much younger than the Canadian-born and established immigrants.

Education: immigrants compared to the Canadian-born

- Overall, nearly two thirds of working-age (25-64 years) immigrants (65%) had a postsecondary diploma or degree, 6 percentage points higher than their Canadian-born counterparts. Immigrants were more likely than the Canadian-born to have a bachelor's degree or university certificate or diploma above the bachelor level as their highest educational attainment. The concentration in higher education is more obvious for recent cohorts.
- While the vast majority (98%) of the Canadian-born obtained their highest degree or diploma in Canada, nearly half of PSE immigrants also had a Canadian degree (47%). However, this proportion decreased significantly for recent arrivals.
- The United States was one of the most popular countries of study for both immigrants and the Canadian-born.
- About one in five PSE immigrants studied business, management, marketing and related support services (21%), comparable to the ratio among their Canadian-born counterparts (20%). Driven by recent and very recent immigrants, engineering followed as the second

most popular field of study among immigrants (12%) – for the Canadian born, the rate was less than 3%. Computer and information sciences and support services was also favoured by immigrants as a field of study (5%), compared to 3% for the Canadian-born. In contrast, people who studied education were under represented among immigrants (5%), compared to 8% among the Canadian-born population.

Highest level of educational attainment

- Nearly half (48.7%) of PSE immigrants had a bachelor's degree or university certificate or diploma above the bachelor level as their highest educational attainment. Younger age groups were more likely to have university degrees. The overall gender makeup of all PSE immigrants was balanced; however, male immigrants were overrepresented relative to females among the higher educational levels.
- The percentages with university degrees were highest among immigrants from Pakistan, Russia, China and South Korea and lowest among those from Sri Lanka, the United Kingdom, Poland and the Philippines. Educational attainment was much higher among recent and very recent cohorts compared to established immigrants.

Major field of study

- Business, management, marketing and related support service was the top postsecondary field of study for immigrants from most main source countries. The postsecondary fields were more concentrated in natural and applied sciences including engineering and computer sciences among immigrants from the current leading source countries. For immigrants from Romania, Russia, China and Iran, engineering was the most common field of study. For immigrants from the Philippines, the percentage in the field of health professions and related sciences was double that of the average

Location of highest level of education

- More than half of PSE immigrants attained their highest level of education in their country of birth. A significant proportion of recent and very recent immigrants obtained their highest degree in the leading source countries, e.g. China, India, and the Philippines. The shifts in countries of highest educational attainment across immigrant cohorts reflect the compositional changes in source country during the last two decades. Sizable proportions of non-US born PSE immigrants received their highest level of education in the United States.

Introduction

For the first time in Canadian census history, detailed location relating to where the highest postsecondary degree was obtained was collected in the 2006 Census.¹ In combination with the existing information on the level of education and field of study, this newly available information provides important clues about the possible reasons why some immigrants may develop a stronger or weaker attachment to the Canadian labour market. Immigrant assimilation theory predicts that holding all other factors constant, integration into the Canadian labour market should be easier for recent immigrants holding a postsecondary degree completed in Canada compared to those who do not. Degrees similar to the Canadian ones, such as those obtained in the US, UK, and/or some European (OECD) countries, are predicted to have similar effects on labour market integration.

Although the current immigrant selection system does not consider field of study, new policies such as Bill C-50² currently do favour certain occupations which are closely related to field of study when selecting skilled immigrants. Research indicates that postsecondary field of study is an important predictor of labour market outcomes for both immigrants and the Canadian-born population (e.g. McBride and Sweetman, 2004³). Large inter-field differences in earnings are observed between immigrants who obtained their education in Canada and those who did not.

However, little research focuses on field of study or the economic impacts of field of study on immigrants, not to mention how postsecondary field of study interplays with location of education in determining the labour market outcomes of immigrants. This area of research remains open.

Drawing upon the newly available information captured in the 2006 Census, this study looks at statistical variations in country of the highest educational attainment and field of study among postsecondary educated (PSE) immigrants. The paper examines the following research question: What is the picture of postsecondary degree holders in terms of field of study and place of the highest degree among various immigrant groups? The study is comprised of two main sections – first, a comparison of immigrant and Canadian-born demographic and educational profiles, and second, an examination of highest level of educational attainment, location and field of study of PSE immigrants.

This study is the first part of a three part project using the 2006 Census micro data to examine interplaying associations between labour market outcomes and educational

¹ Statistics Canada refers to this variable as “Location of study”. This variable indicates the province, territory (in Canada) or country (outside Canada) where the highest certificate, diploma or degree was obtained. It is only reported for individuals who had completed a certificate, diploma or degree above the secondary (high) school level.

² In order to improve the immigration program’s responsiveness to Canada’s labour-market needs, on June 18, 2008, Parliament approved Bill C-50 which made changes to the Immigration and Refugee Protection Act removing the obligation to process all applications CIC receives, and authorizing the Minister of Immigration and Citizenship to issue instructions regarding which applications are eligible for processing, based on the Government of Canada’s goals for immigration. The instructions outline a set of eligibility criteria that apply to all federal skilled worker applications received on or after February 27, 2008.

³ McBride, S. & Sweetman, A. (2004). “Postsecondary field of study and the Canadian labour market outcomes of immigrants and non-immigrants”, Analytical Studies Branch Research Paper Series, Statistics Canada, Catalogue no. 11F0019MIE2004233.

characteristics among PSE immigrants. It is mainly descriptive. The second part of this project will explore employment and occupational outcomes by educational characteristics, the main focus being on the transferability of foreign degrees by field of study and country of highest post secondary degrees. A third investigation using multivariate analyses will separate out independent effects of country of study and field of study on occupational outcomes and earnings, controlling for other socio-demographic factors.

Among the postsecondary educated population, this study focuses on working age immigrants, aged 25-64 years, classified by the following groups: very recent immigrants (who landed between 2001 and 2006); recent immigrants (who landed between 1996 and 2001); and established immigrants (who had been in Canada for more than 10 years). Their Canadian-born counterparts are used as the benchmark, or the comparison group.

The highest level of postsecondary completed certificate, diploma and degree is grouped into 5 categories:

- trades certificate, college diploma, university certificate or diploma below bachelor level;
- bachelor's degree (including university certificate or diploma above bachelor level);⁴
- degree in medicine, dentistry, veterinary medicine or optometry;
- master's degree, and
- earned doctorate.

For the first time with the 2006 Census, data on major field of study was coded with the Classification of Instructional Programs (CIP) Canada 2000. The groupings of the CIP are independent of the level at which study was undertaken. The CIP consists of 13 major categories or primary groupings, 12 of which are used for the Census. The 12 primary groupings are further subdivided into 41 two-digit "series" that represent the most general groupings of programs that are related in subject area.

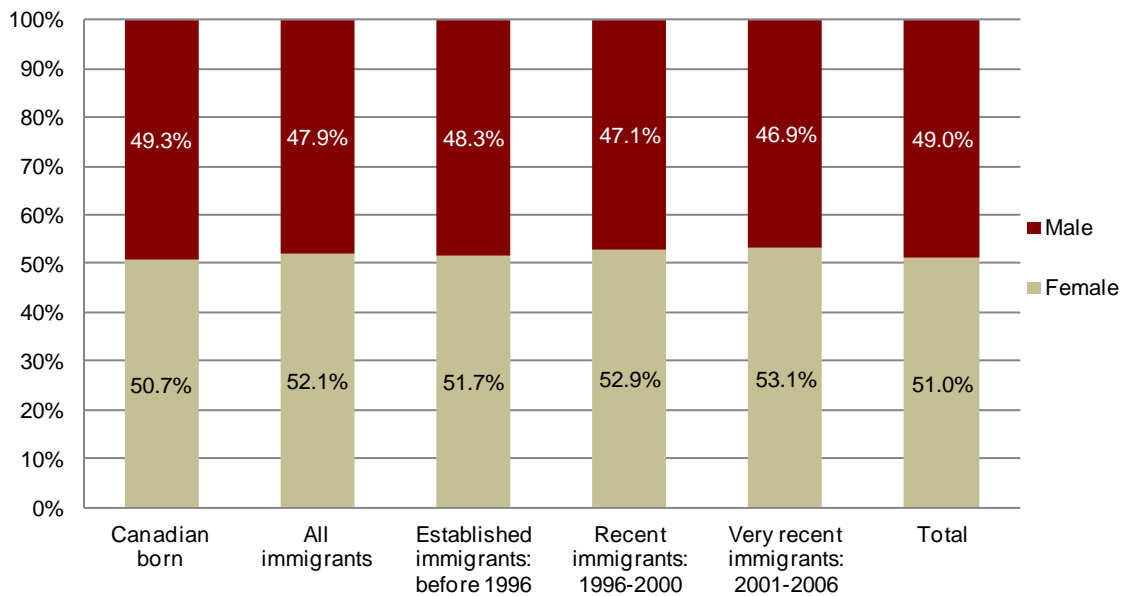
Based on a new question added to the Census on "location of study", the place where the highest degree was obtained is broken down into two groups: 1) inside Canada, and 2) abroad, for selected main countries of origin including the US, the UK, China, India, the Philippines, Pakistan, and etc.

⁴ University certificates or diplomas are commonly connected with professional associations in fields such as accounting, banking, insurance or public administration. If a bachelor's degree is a normal prerequisite for a university certificate or diploma course, as may occur with teaching certificates, then the latter is classified as a university certificate above the bachelor level. In the current report, we do not separate it from the bachelor's degree.

Section 1: Demographic and educational profiles of immigrants vs. the Canadian-born

The 2006 Census enumerated 4,076,705 immigrants between the ages of 25 and 64 years. Of these people, about 70% or 2,838,280 had been in Canada for more than 10 years (established immigrants), and 14% or 556,565 were recent immigrants who landed in Canada during the period from 1996 to 2000, and 17% or 681,860 were very recent immigrants who landed in Canada after 2000.

Figure 1: Gender makeup of immigrants and Canadian-born aged 25-64 by immigration period, 2006



Source: Census2006

As shown in Figure 1, females were slightly over represented among immigrants, compared to their Canadian-born counterparts. The proportion of female immigrants increased slightly with later arrivals. For established immigrants, nearly 52% were female. This proportion increased to around 53% for both recent and very recent immigrants.

Figure 2: Share (%) of age groups for immigrants and Canadian-born aged 25-64 by landing period, 2006

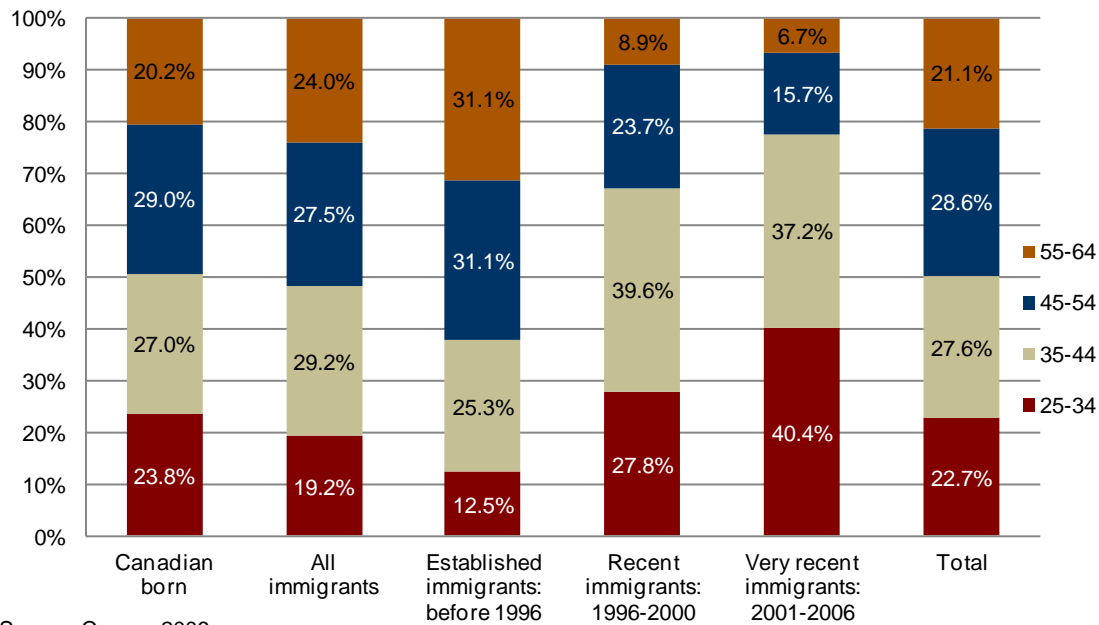


Figure 2 presents the age distribution of the immigrant population in contrast with that of the Canadian-born. Compared to the Canadian-born population, immigrants had a comparable proportion of persons aged 35-54, a lower share of younger people aged 25-34 and a higher share of older individuals aged 55-64. This pattern was driven by established immigrants who represented 70% of the working age immigrant population in 2006. Over 30% of established immigrants were 55-64 years old, whereas this age group represented only 20% of the Canadian-born population. About half of the Canadian population were younger than 45 years old (51%), while this proportion was significantly lower, at 38%, for established immigrants. In contrast, recent immigrants and very recent immigrants were much younger than the Canadian-born and established immigrants: the majority of them were under 45 years old in 2006 (67% and 78%, respectively).

Table 1: Share (%) of highest educational level of immigrant population aged 25-64 by period of landing vs. Canadian-born, 2006

Level of education	Canadian born	immigrants	Established All immigrants: before 1996	Recent immigrants: 1996-2000	Very recent immigrants: 2001-2006	Total
None	15.9%	14.0%	15.8%	10.8%	9.4%	15.5%
High school graduation certificate or equivalency certificate	24.9%	21.1%	23.0%	18.8%	14.9%	24.0%
Trades certificate, college diploma, university certificate or diploma below bachelor level	39.2%	33.3%	36.4%	28.0%	24.5%	37.8%
Bachelor's degree or university certificate or diploma above bachelor level	15.5%	21.4%	17.3%	27.8%	33.4%	16.9%
Degree in medicine, dentistry, veterinary medicine or optometry	0.5%	1.1%	1.0%	1.3%	1.8%	0.6%
Master's degree	3.5%	7.4%	5.1%	11.0%	13.9%	4.4%
Earned doctorate degree	0.5%	1.6%	1.3%	2.4%	2.3%	0.8%
Total	13,148,925	4,076,705	2,838,280	556,565	681,860	17,225,625

Source: Census 2006.

Overall, nearly two thirds of working-age immigrants (65%) had a postsecondary diploma or degree, 6 percentage points higher than their Canadian-born counterparts. Immigrants were more likely than the Canadian-born to have a bachelor's degree as their highest level of educational attainment: one fifth of immigrants had a bachelor's degree (21%), while this proportion was 16% for the Canadian-born. This disparity increased with recent arrivals. Among very recent immigrants who had been in Canada for less than 5 years, one third (33%) had a bachelor's degree; more than double the share among the Canadian-born population (16%). The proportion of master's degree holders among very recent immigrants (14%) was significantly higher than that of the Canadian-born (3.5%). This pattern is also evident for doctorate degree holders. In contrast, immigrants were less likely than the Canadian-born to have a trades certificate, college diploma or university certificate or diploma below bachelor level as their highest level of educational attainment. The concentration in higher education is more obvious for recent cohorts.

As our focus in the current paper is PSE immigrants who were 25-64 years old, the analysis will be limited to this group from this point onwards. The Census 2006 enumerated 2,643,895 PSE immigrants aged 25-64 years. Among them, about two thirds (66%) landed in Canada before 1996, about 15% arrived between 1996 and 2000, and the remaining 20% came to Canada from 2001 to 2006.

Table 2: Share (%) of main countries of highest educational attainment of immigrants aged 25-64 by period of landing vs. Canadian-born, 2006

Country	Canadian born	All immigrants	Established immigrants	Recent immigrants	Very recent immigrants
Canada	98.0%	47.1%	62.0%	26.2%	12.9%
China	0.0%	4.6%	0.9%	9.7%	13.2%
India	0.0%	5.2%	2.9%	8.4%	10.6%
Philippines	0.0%	5.0%	3.9%	6.3%	7.7%
United States	1.4%	3.9%	3.8%	4.1%	4.3%
Pakistan	0.0%	1.8%	0.6%	3.9%	4.1%
United Kingdom	0.3%	4.5%	5.3%	2.9%	3.2%
Romania	0.0%	1.4%	0.7%	2.1%	3.2%
Russia	0.0%	1.2%	0.4%	2.9%	2.3%
South Korea	F	1.3%	0.6%	3.6%	1.8%
France	0.1%	1.4%	1.0%	1.8%	2.5%
Iran	F	0.9%	0.4%	2.8%	1.4%
Poland	0.0%	1.7%	2.3%	0.7%	0.5%
Hong Kong	0.0%	1.2%	1.3%	1.5%	0.3%
Taiwan	0.0%	0.8%	0.6%	2.0%	0.7%
Other countries	0.2%	18.1%	13.5%	23.2%	29.7%
All postsecondary degree holders	7,784,240	2,643,895	1,735,800	391,400	516,695

F: too unreliable to be published

Source: Census 2006.

As shown in Table 2, the vast majority (98%) of the Canadian-born obtained their highest degree or diploma in Canada, whereas 47% of immigrants had a Canadian degree. Six in 10 established immigrants obtained their highest degree in Canada, while this proportion decreased dramatically for recent immigrants and very recent immigrants (26% and 13%, respectively). Among recent immigrants who had come to Canada during the period of 1996-2000, a significant proportion obtained their highest degree in China, India, the Philippines, the United States of America, Pakistan, South Korea, the United Kingdom, Russia, etc. Very recent immigrants who had been in Canada for less than 5 years showed a very similar pattern in terms of distribution of countries of highest educational attainment, but more concentrated in the top source countries: China (13.2%), India (10.6%) and the Philippines (7.7%). The shifts in countries of highest educational attainment across immigrant cohorts reflect the compositional changes in source country during the last two decades.

It is worth noting that the United States was one of the most popular countries of study for immigrants: about 4% of immigrants obtained their highest education in the U.S. and this proportion did not vary much across different immigrant cohorts. A large number of the Canadian-born also completed their highest education south of the border, representing 1.4% of the Canadian-born population, the second largest share among all countries of study.

About one in five immigrants studied business, management, marketing and related support services (21%) (Table 3), which is comparable to the ratio among their Canadian-born counterparts (20%). Engineering followed as the second most popular field of study among immigrants (12%). Recent and very recent immigrants were the main forces driving this proportion high up: 18% of recent immigrants and 20% of very recent immigrants had their highest diploma or degree in engineering, compared to 8% for established immigrants and 3% for the Canadian-born. Health professionals and related clinical sciences were the third

most popular field of study for immigrants (11%) and the second most popular one for the Canadian-born (13%). Computer and information sciences and support services were also favoured by immigrants as a field of study (5%), compared to 3% for the Canadian-born. In contrast, people who studied education were under represented among immigrants (5%), compared to 8% among the Canadian-born population.

Table 3: Share (%) of main fields of study of PSE immigrants aged 25-64, by landing period vs. Canadian-born, 2006

Main fields of study	Canadian born	All PSE immigrants	Established immigrants	Recent immigrants	Very recent immigrants
Business, management, marketing and related support services	20.4%	20.8%	21.0%	20.2%	20.9%
Engineering	2.8%	11.7%	7.9%	18.3%	19.5%
Health professions and related clinical sciences	12.5%	11.3%	12.0%	10.0%	9.9%
Computer and information sciences and support services	3.3%	5.4%	4.7%	7.2%	6.4%
Education	8.1%	5.4%	5.8%	4.4%	4.6%
Social sciences	3.3%	4.2%	4.1%	4.3%	4.5%
Physical sciences	0.7%	1.9%	1.5%	2.6%	2.8%
Visual and performing arts	2.9%	2.9%	3.0%	2.8%	2.7%
Liberal arts and sciences, general studies and humanities	1.6%	2.0%	1.9%	2.4%	2.3%
Engineering technologies/technicians	4.7%	4.1%	5.0%	2.7%	2.1%
Biological and biomedical sciences	1.2%	1.7%	1.5%	2.0%	2.0%
Legal professions and studies	2.1%	1.5%	1.5%	1.3%	1.7%
Agriculture, agriculture operations and related sciences	1.4%	1.3%	1.2%	1.4%	1.6%
Aboriginal and foreign languages, literatures and linguistics	0.5%	1.2%	1.0%	1.4%	1.6%
English language and literature/letters	0.9%	1.2%	1.1%	1.4%	1.5%
Family and consumer sciences/human sciences	1.7%	1.9%	2.1%	1.7%	1.5%
Personal and culinary services	3.8%	2.8%	3.4%	1.9%	1.4%
Multidisciplinary/interdisciplinary studies	1.0%	1.4%	1.4%	1.4%	1.4%
Mechanic and repair technologies/technicians	5.9%	3.5%	4.4%	1.9%	1.3%
Mathematics and statistics	0.4%	1.0%	0.9%	1.2%	1.2%
Other	20.9%	12.9%	14.7%	9.5%	9.3%
Total (number)	7,784,240	2,643,895	1,735,800	391,400	516,695

Source: Census 2006.

The following section takes an in-depth look at the educational characteristics of those working age immigrants who completed a postsecondary certificate, diploma or degree.

Section 2: Highest level of educational attainment, location and field of study of PSE immigrants

This section provides an educational portrait of PSE immigrants aged 25-64 years, focusing on three aspects: highest level of education, field of study, and location of study. Comparisons are made across age groups, gender, immigrant landing period, and countries of birth.

Highest level of educational attainment

Table 4: Highest level of educational attainment by age group

	All immigrants	Trades or college diploma	Bachelor's degree	Degree in medicine, dentistry, veterinary medicine or optometry	Master's degree	Earned doctorate degree
Age group						
25-34	550,240	44.0%	40.9%	1.7%	12.2%	1.2%
35-44	832,095	47.6%	35.4%	1.8%	12.6%	2.6%
45-54	701,910	54.7%	30.1%	1.8%	10.6%	2.8%
55-64	559,655	59.6%	25.5%	1.6%	9.8%	3.3%
Immigrant cohort						
Established	1,735,800	59.6%	28.4%	1.6%	8.4%	2.2%
Recent	391,400	39.8%	39.5%	1.8%	15.6%	3.3%
Very recent	516,695	32.3%	44.0%	2.3%	18.3%	3.0%
%		0.5	0.3	0.0	0.1	0.0
Total	2,643,895	1,356,375	874,230	46,185	301,040	66,070

Source: Census 2006.

Of the 2,643,895 PSE immigrants aged 25-64 years, slightly more than half (51.3%) had a trades or college diploma in 2006, while about one-third (33.1%) obtained a bachelor's degree (Table 4). The percentages of those who achieved higher levels of education are impressive: 11.4% and 2.5% had a master's and doctorate degree, respectively. There were also 1.7% of PSE immigrants who held degrees in medicine, dentistry, veterinary medicine or optometry.

Educational attainment of PSE immigrants varied across age groups. The proportions of immigrants having a trades or college diploma were lower among younger groups than among older groups, consistent with the larger proportions of immigrants holding university degrees among younger groups. Bachelor's degree holders accounted for 40.9% of the 25-34 age group, while they only made up 25.5% of the 55-64 age group. Younger age groups also tended to have higher shares of master's degree holders. The percentage of graduates with a degree in medicine, dentistry, veterinary medicine or optometry was almost identical across the four age groups. There was a noticeable increase in the share of doctorate degree holders in the older age groups. Since a doctorate degree takes more years to complete, this trend might reflect the effect of age or a combined effect of both the age and changes in educational attainment across age cohorts.

As shown in Figure 3, the gender makeup of all PSE immigrants was, for the most part, balanced. However, when disaggregated by highest level of educational attainment, male immigrants were overrepresented among the three highest educational levels, especially for

doctorate degree holders, of which males accounted for about 70%. Women, in comparison, accounted for slightly higher percentages than men among immigrants with a trade or college diploma or a bachelor's degree.

Figure 3: Gender makeup by highest level of educational attainment

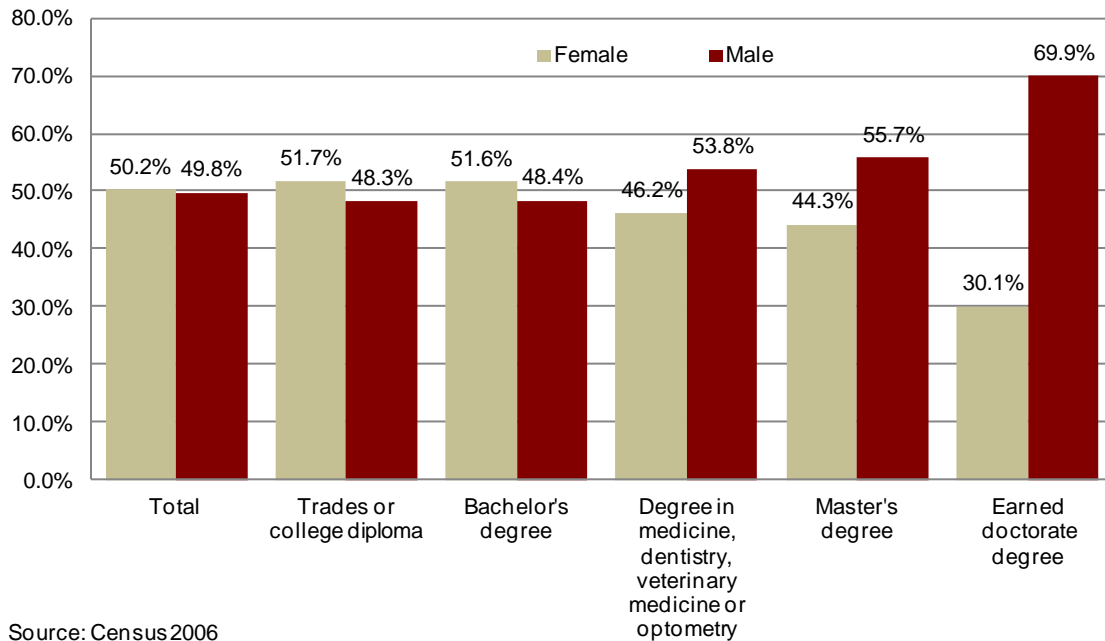


Table 5 presents the composition of highest level of educational attainment of PSE immigrants for the top 15 countries of birth. Immigrants from the United States, France, Russia, Iran and China had the highest percentages of doctorate degree holders, ranging between 6.2% and 4.9%. The top five countries with the highest shares of immigrants holding master's degrees were Russia (25.0%), Pakistan (23.2%), China (18.8%), France (18.7%), and India (18.5%). Overall, about one-third of immigrant postsecondary graduates were bachelor's degree holders; percentages were highest among immigrants from South Korea (52.0%), the Philippines (47.1%), Taiwan (44.5%), and Romania (44.2%). The percentages of PSE immigrants who were bachelor's degree holders from Poland (16.5%), the United Kingdom (24.2%), France (25.8%) and Sri Lanka were relatively low. Postsecondary graduates from these latter four countries were more likely to have completed a trades or college diploma. It is interesting to see that postsecondary graduates from France had rather high percentages at both ends of the spectrum, PhDs (5.5%) and trade or college diplomas (49.1%). Filipino PSE immigrants had one of the highest proportions of bachelor's degree holders, and also the lowest percentage with master's degrees or higher, among main source countries.

Table 5: Level of educational attainment of by country of birth

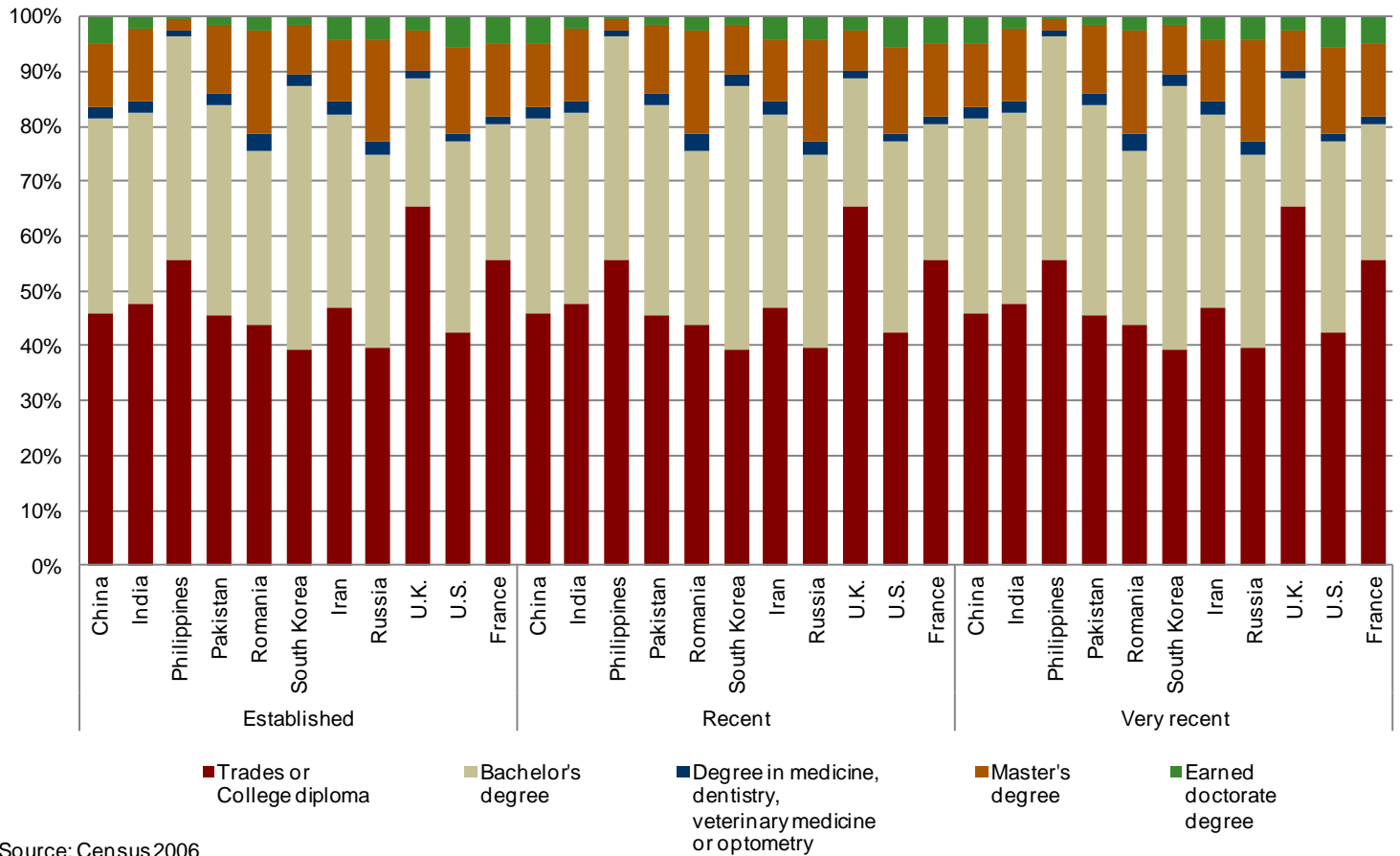
	All immigrants	Trades or college diploma	Bachelor's degree	Degree in medicine, dentistry, veterinary medicine or optometry	Master's degree	Earned doctorate degree
China	197,975	31.7%	43.0%	1.6%	18.8%	4.9%
India	193,785	36.1%	41.3%	2.0%	18.5%	2.1%
Philippines	177,650	48.6%	47.1%	1.3%	2.7%	0.3%
Pakistan	61,500	29.6%	42.7%	3.2%	23.2%	1.2%
Hong Kong	107,170	44.8%	42.8%	1.8%	9.3%	1.3%
Romania	48,060	33.0%	44.2%	2.8%	17.7%	2.3%
South Korea	49,400	32.1%	52.0%	1.4%	12.4%	2.1%
Iran	50,300	36.3%	40.4%	3.7%	14.4%	5.2%
U.K.	239,900	64.2%	24.2%	1.5%	7.6%	2.5%
Russian	34,080	29.6%	37.2%	3.0%	25.0%	5.3%
U.S.	110,165	40.8%	35.7%	1.4%	16.0%	6.2%
Taiwan	34,145	36.4%	44.5%	2.4%	14.7%	2.1%
Poland	79,250	63.2%	16.5%	1.5%	16.9%	1.8%
Sri Lanka	34,605	64.5%	27.0%	1.8%	5.1%	1.6%
France	46,355	49.1%	25.8%	0.8%	18.7%	5.5%
Other	1,179,560	59.7%	27.7%	1.7%	8.8%	2.1%
All countries of birth	2,643,895	1,356,375	874,230	46,185	301,040	66,070

Source: Census 2006.

A further breakdown by period of immigration reveals large differences in immigrants' educational attainment across immigrant cohorts for some main immigrant source countries (Figure 4). Percentages of immigrants with a bachelor's degree and above increased substantially for later cohorts for several main source countries, such as China, India, the Philippines, Pakistan, Romania and Iran. Of PSE immigrants from China, the percentage with a bachelor's degree and above increased substantially from 54.2% for established immigrants to around three quarters for the recent arrivals (75.7% for recent immigrants and 73.3% for very recent immigrants).

Among immigrants from main countries of origin, those from the United Kingdom, Sri Lanka and Poland had the lowest percentages with university degrees, for all three immigrant cohorts.

Figure 4: Highest level of educational attainment by main countries of birth and by period of landing



Source: Census 2006

Major field of study

As shown in Table 6, one out of every five PSE immigrants studied business, management, marketing and related support services, followed by engineering (11.7%) and health professions and related clinical sciences (11.3%); computer and information sciences and support services and education, each accounted for about 5.4%. Over half (54%) of PSE immigrants were concentrated in these top five fields.

Table 6: Major field of study by age group

	25-34	35-44	45-54	55-64	Total
Business, management, marketing and related support services	23.2%	21.2%	20.5%	18.3%	20.8%
Engineering	11.0%	14.4%	11.6%	8.4%	11.7%
Health professions and related clinical sciences	10.3%	10.9%	12.1%	11.7%	11.3%
Computer and information sciences and support services	9.5%	6.4%	3.8%	1.8%	5.4%
Education	3.5%	4.3%	5.3%	8.8%	5.4%
Social sciences	5.2%	4.1%	4.0%	3.6%	4.2%
Engineering technologies/technicians	3.2%	3.7%	4.5%	5.1%	4.1%
Mechanic and repair technologies/technicians	1.8%	2.8%	4.2%	5.1%	3.5%
Visual and performing arts	3.5%	2.8%	2.9%	2.7%	2.9%
Personal and culinary services	2.1%	2.7%	2.9%	3.5%	2.8%
Liberal arts and sciences, general studies and humanities	2.7%	1.9%	1.9%	1.7%	2.0%
Family and consumer sciences/human sciences	1.6%	1.8%	2.1%	2.2%	1.9%
Physical sciences	1.5%	2.1%	1.9%	2.0%	1.9%
Biological and biomedical sciences	2.3%	1.8%	1.4%	1.3%	1.7%
Legal professions and studies	1.8%	1.6%	1.5%	1.2%	1.5%
Multidisciplinary/interdisciplinary studies	1.8%	1.4%	1.2%	1.0%	1.4%
Agriculture, agriculture operations and related sciences	0.9%	1.4%	1.6%	1.3%	1.3%
English language and literature/letters	1.2%	1.2%	1.1%	1.5%	1.2%
Aboriginal and foreign languages, literatures and linguistics	1.1%	1.2%	1.2%	1.2%	1.2%
Mathematics and statistics	1.1%	1.0%	0.9%	1.0%	1.0%
Other	10.8%	11.4%	13.4%	16.6%	12.9%
All PSE immigrants	550,240	832,095	701,910	559,655	2,643,895

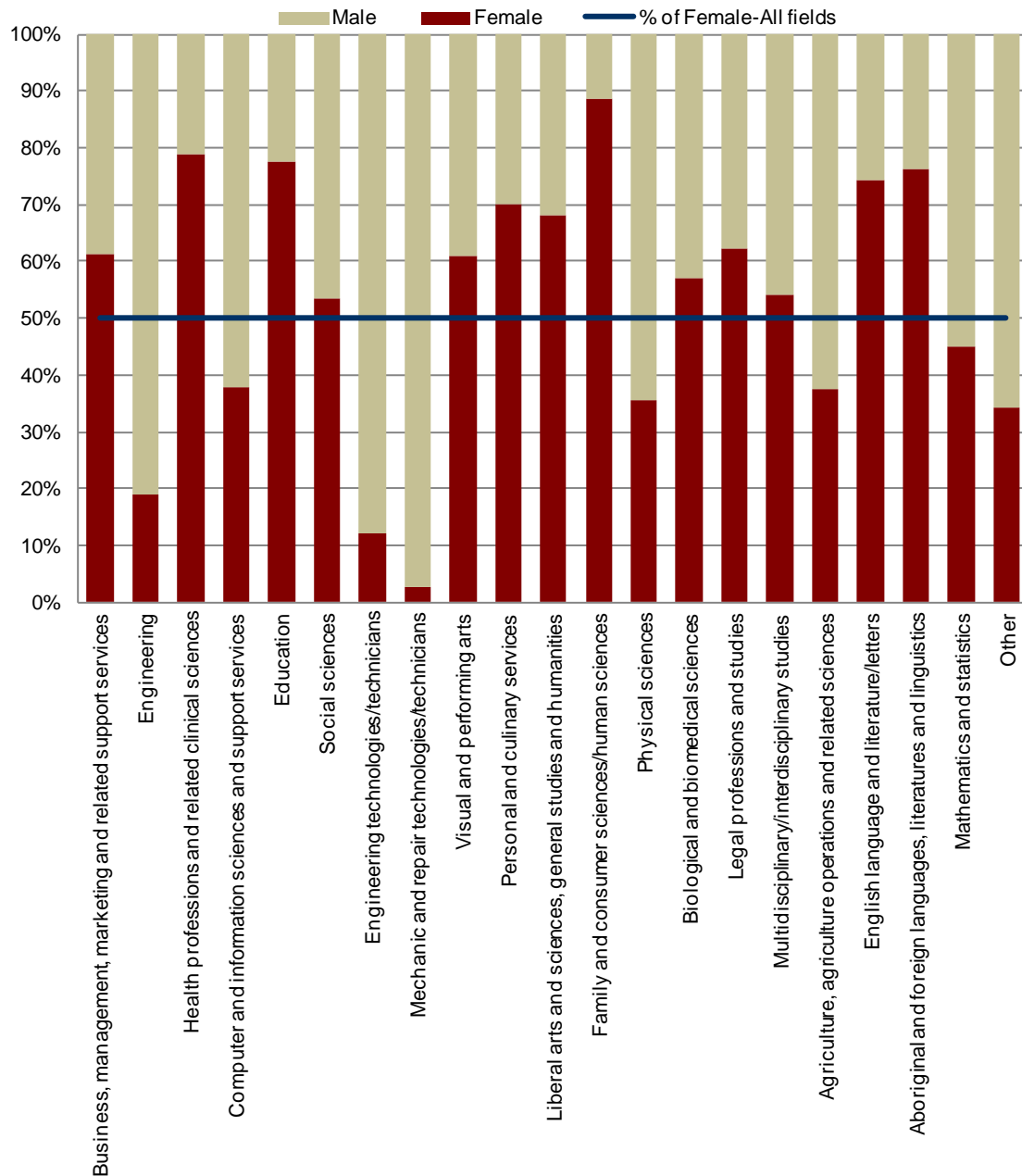
Source: Census 2006.

There were substantial differences in the distribution of postsecondary fields across age groups. Business, management, marketing and related support services was the most popular postsecondary field for all age groups (18.3%-23.2%). The second preferred field of study, among the younger age groups 25-34 and 35-44, was engineering, but among the older age groups 45-54 and 55-64, was health professions and related clinical sciences. The 35-44 age group had the highest percentage in engineering (14.4%), about three percentage points higher than the 25-34 and 45-54 age groups and about six percentage points higher than the 55-64 age group.

Computer and information sciences and support services gained much more popularity among younger age groups. For the youngest age group, it was the fourth most popular postsecondary field and accounted for 9.5%, while for those aged 55-64, it ranked in 12th place and accounted for less than two percent (1.8%).

Moving from older age groups to younger ones, on the one hand, the percentages in the fields of education, engineering technologies/technicians, mechanic and repair, technologies/technicians, visual and performing arts, family and consumer sciences/human sciences declined moderately. On the other hand, percentages in social sciences, visual and performing arts, liberal arts and sciences, general studies and humanities, biological and biomedical sciences and multidisciplinary/interdisciplinary studies increased to some extent among younger immigrants. In general, there was a higher concentration in the top 20 fields among younger age groups than among older ones. The percentage in "other" fields declined from 16.6% to 10.8% moving from the oldest group to the youngest one.

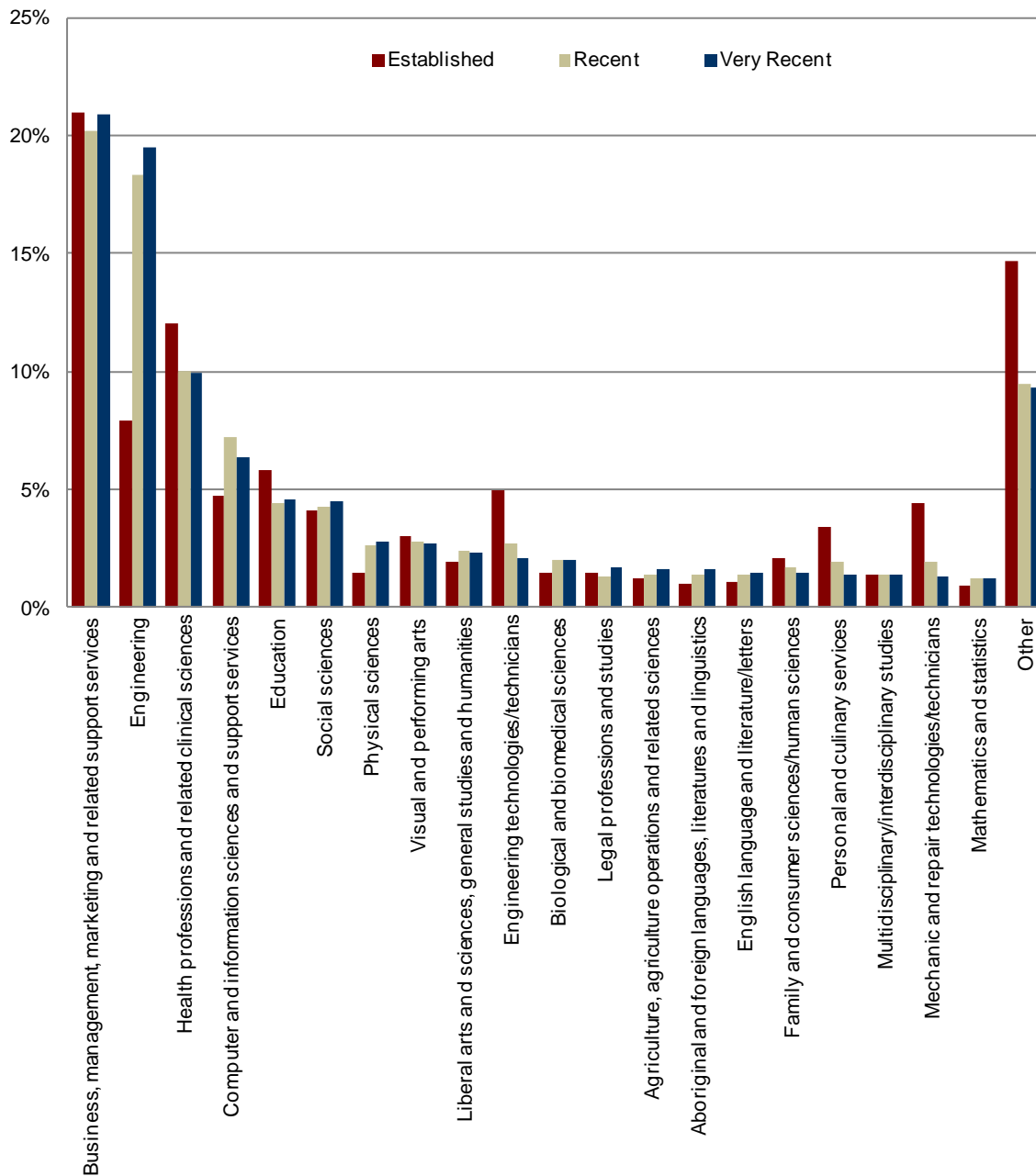
Figure 5: Gender makeup by major field of study



Source: Census 2006

Figure 5 reveals large differences in gender makeup among the top 20 fields of study. Although males and females accounted for almost equal shares of all PSE immigrants (49.8% vs. 50.2%), most fields were dominated by one gender. Engineering, engineering technologies/technicians and mechanic, repair technologies/technicians and physical sciences were predominantly the domains of male immigrants. Female immigrants, alternatively, were highly concentrated in the fields of family and consumer sciences/human sciences, health professions and related clinical sciences, education, aboriginal and foreign languages, literature and linguistics and English language and literature/letters.

Figure 6: Distribution of major field of study by period of landing



Source: Census 2006

Figure 6 breaks down the distribution of major fields of study by immigrant cohort. The percentages of those who studied business, management, marketing and related support services varied little across cohorts, accounting for about 20%. In contrast, the proportion of immigrants in engineering fields of study increased with recent arrivals. Compared to 7.9% for established immigrants, the percentage of engineering degree holders among recent immigrants was double, at 18.3% and even relatively greater for very recent immigrants, at 19.5%.

There were also noticeable changes in shares of immigrants in the fields of health professions and related clinical sciences, engineering technologies/technicians, personal and culinary services and mechanic and repair technologies/technicians across immigrant cohorts. The percentages in these fields showed sizable declines from established immigrants to recent immigrants and further to very recent immigrants. On the contrary, the percentage in computer and information sciences and support services increased from 4.7% for established immigrants to 7.2% for recent immigrants and 6.4% for very recent immigrants.

Consistent with the distribution across age groups, fields of study for recent arrivals were more concentrated in the top 20 fields than for established immigrants. The proportion in “other” fields declined from 14.7% for established immigrants to 9.5% and 9.3% for recent and very recent immigrants. The increased concentration in engineering among more recent arrivals is contributing to this trend.

Table 7: Major field of study by highest level of educational attainment

	Trades or college diploma	Bachelor's degree	Degree in medicine, dentistry, veterinary medicine or optometry	Master's degree	Earned doctorate degree	Total
Business, management, marketing and related support services	23.7%	19.1%	0.7%	19.7%	3.1%	20.8%
Engineering	4.2%	20.4%	0.9%	20.4%	19.2%	11.7%
Health professions and related clinical sciences	13.2%	6.8%	78.9%	4.9%	12.0%	11.3%
Computer and information sciences and support services	5.4%	5.7%	0.1%	5.8%	2.6%	5.4%
Education	3.4%	8.0%	0.5%	7.7%	3.6%	5.4%
Social sciences	1.5%	7.5%	0.1%	7.0%	6.9%	4.2%
Engineering technologies/technicians	X	F	F	F	F	4.1%
Mechanic and repair technologies/technicians	X	F	F	F	F	3.5%
Visual and performing arts	3.3%	2.8%	0.1%	2.4%	1.3%	2.9%
Personal and culinary services	X	F	F	F	F	2.8%
Liberal arts and sciences, general studies and humanities	1.6%	3.3%	0.1%	1.0%	0.3%	2.0%
Family and consumer sciences/human sciences	3.1%	0.8%	0.1%	0.5%	0.3%	1.9%
Physical sciences	0.5%	2.5%	0.3%	3.9%	14.0%	1.9%
Biological and biomedical sciences	0.3%	2.5%	0.7%	3.4%	12.2%	1.7%
Legal professions and studies	1.1%	2.2%	0.1%	1.6%	1.3%	1.5%
Multidisciplinary/interdisciplinary studies	0.7%	2.4%	0.3%	1.3%	1.3%	1.4%
Agriculture, agriculture operations and related sciences	1.4%	1.1%	0.1%	1.4%	2.1%	1.3%
English language and literature/letters	0.6%	2.1%	0.0%	1.9%	1.7%	1.2%
Aboriginal and foreign languages, literatures and linguistics	0.6%	1.7%	0.0%	2.2%	2.3%	1.2%
Mathematics and statistics	0.3%	1.6%	0.1%	1.9%	3.4%	1.0%
Other	15.0%	9.4%	16.8%	12.9%	12.2%	12.9%
All immigrants	1,356,375	874,230	46,185	301,040	66,070	2,643,895

F: too unreliable to be published

Source: Census 2006.

As shown in Table 7, the distribution pattern of postsecondary fields differed across levels of highest education. For trades or college graduates, management, marketing and related support services was the most popular field of study – 23.7% of them studied in this field; this is followed by health professions and related clinical sciences, at 13.2%.

Engineering and business, management, marketing and related support services were the two most popular fields for bachelor's degree holders, each accounting for about 20%. The other preferred fields of study for bachelor's degree holders included education, social sciences, health professions and related clinical sciences, and computer and information sciences and support services, with percentages ranging between 8.0% and 5.8%.

The top fields of study for master's degree holders were quite similar to those of immigrants with a bachelor's degree: about 20% studied in each of the two most popular fields – engineering and business, management, marketing and related support services. For doctorate degree earners, engineering was the most popular field of study (19.2%), although the second to sixth fields were different from all other educational attainment groups. Physical sciences, biological and biomedical sciences were next in terms of field of study, accounting for 14.0% and 12.2% respectively, followed by health professions and related clinical sciences (12%), social sciences (6.9%) and education (3.6%). Unlike master's and bachelor's degree holders, only 3.1% of immigrant doctorate graduates held degrees in business, management, marketing and related support services.

Table 8: Major field of study by main countries of birth

	Total	China	India	Philippines	Pakistan	Hong Kong	Romania	South Korea	Iran	U.K.	Russia	U.S.	Other
Business, management, marketing and related support services	20.8%	21.5%	21.2%	26.6%	19.4%	31.6%	10.8%	14.9%	13.2%	19.0%	9.9%	15.0%	21.0%
Engineering	11.7%	25.8%	13.6%	13.0%	15.9%	10.4%	32.3%	14.0%	22.2%	4.9%	26.8%	3.2%	9.4%
Health professions and related clinical sciences	11.3%	7.9%	8.5%	23.2%	7.7%	8.4%	8.9%	8.7%	12.1%	12.0%	8.8%	12.0%	11.0%
Computer and information sciences and support services	5.4%	9.6%	4.7%	4.2%	7.2%	8.5%	5.8%	5.3%	6.0%	3.1%	6.2%	2.9%	5.2%
Education	5.4%	3.1%	5.0%	5.9%	4.3%	3.3%	2.9%	6.4%	2.8%	7.1%	6.1%	10.8%	5.3%
Social sciences	4.2%	3.6%	5.6%	2.3%	6.5%	5.9%	4.7%	5.6%	3.8%	3.7%	5.4%	5.4%	4.0%
Engineering technologies/technicians	4.1%	2.2%	2.7%	3.0%	2.1%	3.4%	2.9%	1.3%	2.8%	6.5%	2.4%	2.3%	4.8%
Mechanic and repair technologies/technicians	3.5%	1.0%	2.1%	2.3%	1.4%	1.8%	3.0%	0.9%	1.5%	4.9%	1.6%	2.5%	4.4%
Visual and performing arts	2.9%	2.1%	1.7%	1.3%	1.9%	3.9%	2.0%	9.6%	3.5%	3.4%	4.0%	5.1%	2.9%
Personal and culinary services	2.8%	1.4%	1.0%	1.3%	0.8%	1.7%	2.1%	1.5%	3.1%	3.4%	1.4%	2.3%	3.7%
Liberal arts and sciences, general studies and humanities	2.0%	0.8%	8.9%	1.2%	8.5%	1.7%	0.8%	1.5%	1.1%	1.1%	0.9%	2.1%	1.4%
Family and consumer sciences/human sciences	1.9%	0.9%	1.6%	1.6%	1.9%	1.4%	1.6%	3.6%	1.9%	2.1%	1.1%	1.5%	2.2%
Physical sciences	1.9%	4.2%	2.6%	0.8%	2.9%	1.4%	3.5%	2.2%	2.9%	1.8%	4.8%	1.4%	1.5%
Biological and biomedical sciences	1.7%	2.1%	2.4%	0.9%	2.5%	1.6%	1.3%	2.0%	2.6%	1.7%	1.7%	2.6%	1.5%
Legal professions and studies	1.5%	0.9%	1.2%	0.5%	1.2%	0.9%	1.6%	1.2%	1.0%	1.8%	1.1%	2.2%	1.8%
Multidisciplinary/interdisciplinary studies	1.4%	1.0%	3.4%	1.2%	3.0%	1.8%	0.8%	1.4%	2.0%	0.9%	0.8%	1.3%	1.1%
Agriculture, agriculture operations and related sciences	1.3%	1.0%	1.0%	1.4%	1.2%	0.6%	0.9%	1.7%	1.2%	1.3%	0.9%	1.2%	1.5%
English language and literature/letters	1.2%	1.8%	1.9%	0.5%	1.7%	0.6%	0.5%	2.8%	2.1%	1.7%	0.6%	2.9%	0.9%
Aboriginal and foreign languages, literatures and linguistics	1.2%	1.6%	1.0%	0.1%	0.6%	0.8%	1.5%	3.0%	2.2%	0.6%	2.5%	1.1%	1.3%
Mathematics and statistics	1.0%	1.6%	1.2%	0.5%	1.5%	2.1%	1.4%	1.4%	1.7%	0.7%	2.8%	0.8%	0.8%
Other	12.9%	5.8%	8.9%	8.2%	8.1%	8.3%	11.0%	11.1%	10.2%	18.5%	10.1%	21.4%	14.3%
All PSE immigrants	2,643,895	197,975	193,785	177,650	61,500	107,170	48,060	49,400	50,300	239,900	34,080	110,165	1,373,915

Source: Census 2006.

There were remarkable differences in the distribution of postsecondary fields among immigrants born in different countries (Table 8). Business, management, marketing and related support service was the top postsecondary field for immigrants from most main source countries. The percentage in this field was particularly high for those from Hong Kong: about one out of every three studied in this field. Filipino postsecondary graduates also had a very high percentage in this field (26.6%).

For graduates born in Romania, Russia, China and Iran, engineering was the most preferred field. About one-third of PSE immigrants from Romania studied in this field; percentages in this field were also as high for those born in Russia (26.8%) and in China (25.8%). Immigrants from Russia and China also had relatively higher than average percentages in other science-related fields, such as computer and information sciences and support services, physical science and mathematics and statistics. Postsecondary graduates born in the United States and the United Kingdom had relatively lower proportions in engineering (3.2% and 4.9% respectively), but relatively higher percentages in education (10.8% and 7.1% respectively). The postsecondary fields were more diversified among graduates born in the United States and the United Kingdom than among those from the leading source countries, such as China and India.

Slightly more than one in ten PSE immigrants studied in health professions and related clinical sciences (11.3%). However, for immigrants from the Philippines, the percentage in this field were double that of the average. This may be related to the fact that many Filipinos enter Canada through the Live-in Caregiver Program, which recruits people with a health-related educational background (See Annex 1: Filipino immigrants and Live-In Caregiver Program). The percentages of graduates born in India and Pakistan who pursued the liberal arts and sciences, general studies and humanities were fairly large (8.9% and 8.5% respectively) and much higher than the average for all immigrants as a whole (2.0%).

Location of the highest education

Overall, nearly half of PSE immigrants (47.1%) completed their highest degrees in Canada. India, the Philippines, China and the United Kingdom were the other main locations of study; immigrants who studied in each of these countries accounted for about 5% of the total.

Table 9: Location of study by period of landing

	All immigrants	Established	Recent	Very recent
Canada	47.1%	62.0%	26.2%	12.9%
P.R. China	4.6%	0.9%	9.7%	13.2%
India	5.2%	2.9%	8.4%	10.6%
Philippines	5.0%	3.9%	6.3%	7.7%
U.S.A.	3.9%	3.8%	4.1%	4.3%
Pakistan	1.8%	0.6%	3.9%	4.1%
United Kingdom	4.5%	5.3%	2.9%	3.2%
Romania	1.4%	0.7%	2.1%	3.2%
Russian Federation	1.2%	0.4%	2.9%	2.3%
South Korea	1.3%	0.6%	2.4%	2.7%
France	1.4%	1.0%	1.8%	2.5%
Iran	0.9%	0.4%	1.9%	2.1%
Ukraine	0.8%	0.3%	1.9%	1.7%
Hong Kong	1.2%	1.3%	1.5%	0.3%
Taiwan	0.8%	0.6%	2.0%	0.7%
Poland	1.7%	2.3%	0.7%	0.5%
Other	17.3%	13.2%	21.3%	28.0%
All countries of study	2,643,895	1,735,800	391,400	516,695

Source: Census 2006.

Table 9 also shows that the distribution of location of study of PSE immigrants varies considerably across immigrant cohorts, reflecting changes in immigrant source countries during the past two decades. About six in 10 established immigrants obtained their highest education in Canada (62%), but the share dropped to 26.2% and 12.9% for recent and very recent immigrants. As a result of the dramatic shifts towards non-traditional source countries during the last 20 years, such as South and East Asian countries, the shares of immigrants who obtained their highest degrees in these countries were much higher among recent and very recent immigrants than among established immigrants. For example, the percentage of those who obtained their highest education in China increased from less than one percent among established immigrants to nearly 10% among recent immigrants and further to about 13% for very recent immigrants. The proportion of those who completed their highest education in India experienced a similar increase. In 2006, about one in 10 very recent PSE immigrants obtained their highest education in India. The shares of PSE immigrants who acquired their highest postsecondary degree in other source countries, such as the Philippines, Pakistan, South Korea, Iran, Romania, and Russia are also higher among very recent immigrants relative to earlier cohorts.

Table 10: Country of study by gender

	Total	Female	Male
Canada	1,244,885	50.5%	49.5%
P.R. China	121,730	53.0%	47.0%
India	137,665	49.5%	50.5%
Philippines	132,540	62.2%	37.8%
United States of A	103,700	46.5%	53.5%
Pakistan	46,285	46.2%	53.8%
United Kingdom	119,390	42.0%	58.0%
Romania	36,125	47.8%	52.2%
Russian Federatio	30,480	51.1%	48.9%
South Korea	33,290	53.6%	46.4%
France	36,205	42.5%	57.5%
Iran	24,650	51.5%	48.5%
Ukraine	20,470	54.0%	46.0%
Hong Kong	30,705	53.4%	46.6%
Taiw an	21,500	58.1%	41.9%
Poland	46,080	51.1%	48.9%
Other	458,200	48.3%	51.7%
Total	2,643,895	50.2%	49.8%

Source: Census 2006.

As shown in Table 10, the gender makeup of PSE immigrants was not balanced for several countries of study. Females significantly outnumbered males among immigrants who studied in the Philippines (62.2%), Taiwan (58.1%), South Korea (53.6%) and China (53.0%), while males were relatively over represented among immigrants who completed their highest education in the United Kingdom (58%), France (57.5%), Pakistan (53.8%) and the United States (53.5%).

Figure 7: Location of study by age group

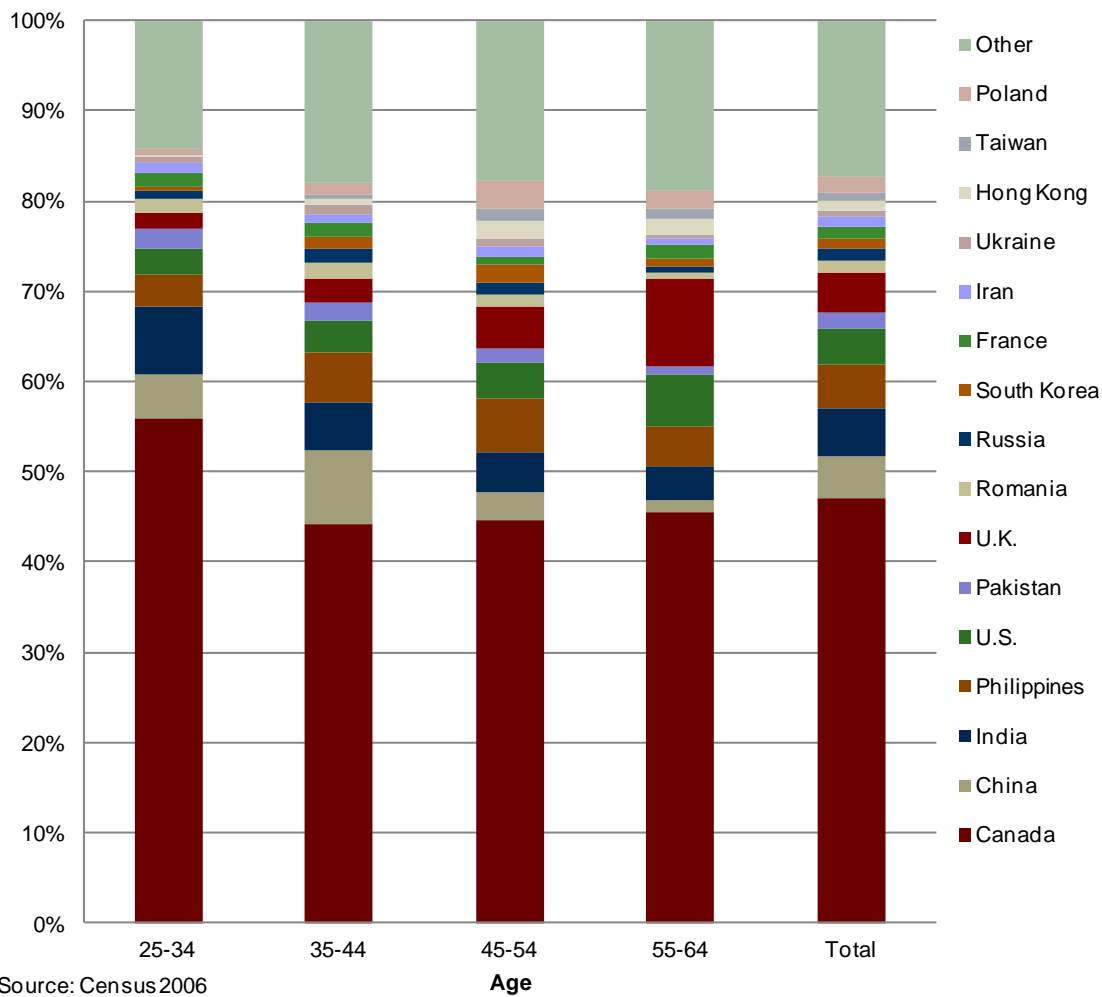


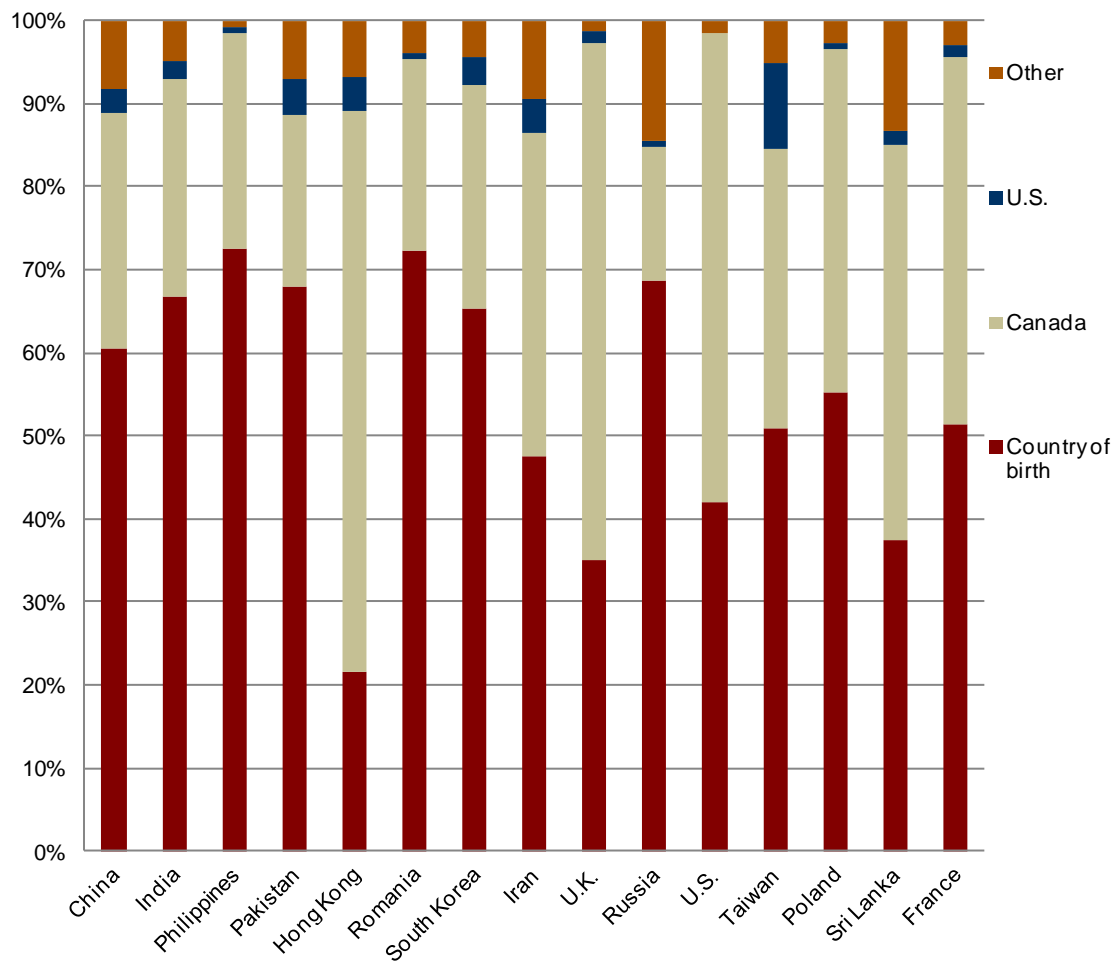
Figure 7 illustrates the variations in the distribution of countries of study across age groups. The youngest age group had the highest percentage of immigrants who studied in Canada (55.9%). The share of graduates who studied in the United Kingdom was higher among older groups and highest among the oldest group (55-64) (9.8%). The percentage of immigrants who studied in India was highest among the youngest group (7.4%), while the share of those who studied in China was highest among the 35-44 age group (8.1%).

Figure 8 shows the distribution of country of study by country of birth for the main source countries. For 10 out of the 15 main source countries, over half of PSE immigrants had their highest education in their country of birth. This percentage was particularly high for those who were born in the Philippines (72.6%), Romania (72.3%), Russia (68.6%), Pakistan (68.0%), India (66.7%), South Korea (65.4%) and China (60.5%). In contrast, only 22% of postsecondary graduates born in Hong Kong received their highest level of education in Hong Kong, while a majority of them completed their highest education in Canada (67.4%). Although this "educated in Canada" phenomenon was most noticeable among the Hong Kong-born, it was not limited to them. A majority of the postsecondary graduates born in the United Kingdom and the United States obtained their highest education in Canada (62.4% and 56.3%, respectively), while less than half of them received their highest

education in their countries of birth (34.9% and 42.1% respectively). The percentages of Canadian degrees holders were also relatively higher for immigrants from Sri Lanka (47.6%), France (44.4%) and Poland (41.2%).

There were also sizable proportions of non-US born immigrants who had their highest postsecondary education in the United States. For example, 10.2% of postsecondary graduates born in Taiwan acquired their highest education in the United States. Immigrants from Pakistan and Hong Kong also noted higher than average shares with their highest education in the U.S., at over 4%.

Figure 8: Country of study by main countries of birth



Source: Census 2006

Table 11: Highest level of educational attainment by main countries of study

	Trades or college diploma	Bachelor's degree	Degree in medicine, dentistry, veterinary medicine or optometry	Master's degree	Earned doctorate degree	All immigrants
Canada	55.5%	38.9%	35.5%	36.3%	39.4%	47.1%
China	2.7%	7.1%	5.2%	5.8%	5.4%	4.6%
India	3.0%	7.6%	5.1%	8.8%	3.1%	5.2%
Philippines	3.8%	8.6%	4.9%	1.1%	0.5%	5.0%
U.S.	1.8%	4.1%	4.0%	10.6%	15.1%	3.9%
Pakistan	0.9%	2.5%	3.8%	3.7%	0.2%	1.8%
U. K.	5.5%	2.9%	4.7%	3.7%	8.2%	4.5%
Romania	0.7%	2.1%	2.8%	2.2%	0.8%	1.4%
Russia	0.5%	1.3%	2.7%	2.9%	3.0%	1.2%
South Korea	0.7%	2.2%	0.6%	1.3%	0.7%	1.3%
France	1.2%	0.9%	0.8%	2.6%	5.3%	1.4%
Iran	0.5%	1.5%	2.3%	1.1%	1.0%	0.9%
Ukraine	0.4%	1.0%	1.3%	1.7%	1.3%	0.8%
Hong Kong	1.7%	0.7%	0.4%	0.4%	0.2%	1.2%
Taiwan	0.6%	1.3%	0.9%	0.4%	0.2%	0.8%
Poland	2.1%	0.5%	1.5%	3.7%	1.5%	1.7%
Other	18.4%	16.8%	23.3%	13.8%	13.9%	17.3%
Total	1,356,375	874,230	46,185	301,040	66,070	2,643,895

Source: Census 2006.

Of immigrants with a trades or college diploma, more than half (55.5%) obtained their degrees in Canada, 8.4 percentage points higher than the average of all degree holders. In contrast, for all other levels of degrees, percentages with a Canadian degree were less than 40% (38.9%, 36.3%, and 39.4% for immigrants with bachelor's, master's and doctorate degrees, respectively).

There were a total of 134,770 people aged 25-64 in Canada holding a doctorate degree, 49% of whom were immigrants. About four in ten immigrant doctorate degree holders earned their degrees in Canada (39.4%). The proportions of doctorate degrees holders who completed their education in the United States and the United Kingdom were also high, accounting for 15.1% and 8.2% of the total, respectively. The relatively high percentages of PhDs trained in the U.S. and the U.K. are not surprising. First, established immigrants accounted for about 60% of the immigrants considered in this study and many of them came from these two countries. Second, many immigrants to Canada born in other countries also pursued their doctorate education in these two countries. China and France ranked as the fourth and fifth most popular countries of study for doctorate degree holders (5.4% and 5.3%, respectively).

In 2006, there were a total of 110,360 people aged 25-64 in Canada holding a degree in medicine, dentistry, veterinary medicine or optometry. Of them, 42% were immigrants and of these, 65% (29,705) completed their training outside Canada. Given the shortage of medical professionals in Canada and the magnitude of foreign trained medical professionals, it is important to know how the human capital of this group is used in Canada.

Table 12: Major field of study by main countries of study

	Total	Canada	China	India	Philippines	U.S.	Pakistan	U.K.	Romania	Russia	South Korea	France	Other
Business, management, marketing and related support services	550,405	50.4%	3.8%	4.8%	7.1%	3.7%	1.4%	4.4%	0.5%	0.3%	0.7%	1.5%	21.4%
Engineering	308,905	26.5%	12.7%	6.1%	6.8%	3.4%	2.2%	4.2%	4.6%	3.3%	1.8%	1.2%	27.1%
Health professions and related clinical sciences	297,755	52.4%	3.4%	3.0%	9.2%	3.6%	1.2%	5.0%	0.9%	0.9%	0.9%	0.7%	18.8%
Computer and information sciences and support services	142,135	58.4%	7.5%	3.4%	2.6%	3.9%	1.6%	2.8%	1.3%	1.0%	0.8%	1.6%	15.1%
Education	141,465	44.1%	2.7%	5.1%	6.9%	6.6%	1.6%	3.4%	0.6%	1.4%	1.8%	0.8%	25.0%
Social sciences	111,295	45.1%	3.6%	8.4%	3.0%	4.3%	3.2%	2.7%	1.7%	1.6%	1.6%	1.4%	23.5%
Engineering technologies/technicians	108,360	56.5%	1.9%	2.7%	2.8%	1.1%	0.7%	8.5%	0.8%	0.6%	0.3%	0.9%	23.2%
Mechanic and repair technologies/technicians	91,225	57.0%	0.8%	1.9%	2.5%	1.3%	0.6%	6.0%	1.2%	0.4%	0.2%	1.0%	27.0%
Visual and performing arts	77,605	46.8%	3.4%	3.4%	1.6%	7.2%	1.1%	4.8%	0.7%	1.6%	4.4%	1.7%	23.3%
Personal and culinary services	74,075	61.6%	1.2%	1.1%	1.2%	1.6%	0.2%	5.9%	0.7%	0.5%	0.5%	2.7%	22.8%
Liberal arts and sciences, general studies and humanities	53,820	31.4%	1.7%	31.3%	2.9%	3.7%	9.5%	1.4%	0.6%	0.3%	0.9%	0.7%	15.6%
Family and consumer sciences/human sciences	50,310	48.4%	1.6%	4.2%	3.2%	1.8%	2.0%	5.4%	0.9%	0.6%	3.1%	1.1%	27.6%
Physical sciences	50,150	29.3%	11.4%	9.2%	2.1%	4.3%	2.9%	5.8%	2.8%	3.4%	1.7%	2.3%	24.6%
Biological and biomedical sciences	44,555	46.9%	4.5%	8.1%	2.1%	6.2%	3.2%	4.6%	0.7%	1.3%	1.0%	2.2%	19.1%
Legal professions and studies	40,150	50.4%	3.3%	3.8%	1.2%	3.2%	1.5%	3.6%	1.5%	0.8%	1.0%	1.7%	27.8%
Multidisciplinary/interdisciplinary studies	35,825	47.4%	2.1%	16.9%	4.3%	4.7%	4.4%	2.2%	0.7%	0.6%	0.9%	1.2%	14.4%
Agriculture, agriculture operations and related sciences	35,200	26.5%	3.4%	4.7%	6.4%	3.6%	1.9%	5.7%	1.0%	1.0%	2.1%	2.2%	41.5%
English language and literature/letters	32,680	34.2%	9.6%	10.6%	1.8%	6.6%	3.0%	4.4%	0.4%	0.4%	3.7%	0.8%	24.5%
Aboriginal and foreign languages, literatures and linguistics	30,880	31.0%	8.6%	5.7%	0.4%	4.0%	1.2%	3.1%	1.7%	2.4%	3.9%	3.8%	34.2%
Mathematics and statistics	26,095	40.0%	6.6%	6.8%	2.6%	5.2%	3.3%	4.5%	1.8%	3.8%	1.8%	1.7%	22.0%
Other	341,005	54.0%	1.9%	3.1%	2.9%	4.8%	1.1%	4.9%	1.1%	0.8%	1.0%	1.5%	22.9%
All PSE immigrants	2,643,895	47.1%	4.6%	5.2%	5.0%	3.9%	1.8%	4.5%	1.4%	1.2%	1.3%	1.4%	22.7%

Source: Census 2006.

Table 12 shows the distribution of fields of study by country of study. Slightly more than half (50.4%) of PSE immigrants in the most popular postsecondary field – business, management, marketing and related support services – studied in Canada. The Philippines was the second most common country of study among immigrants with a business degree (7.1%), followed by India (4.8%) and the United Kingdom (4.4%).

The distribution pattern of location of study differed for another popular postsecondary field - engineering. About one in four immigrant graduates in engineering acquired their degrees in Canada (26.5%); engineering degrees earned in China accounted for 12.7%, followed by those earned in the Philippines (6.8%), India (6.1%) and Romania (4.6%). It is worth noting that 4.6% of total PSE immigrants completed their highest education in China, but the proportion of those who studied engineering in China was about three times higher than this level.

Slightly more than half of immigrant graduates with a degree in health professions and related clinical sciences studied in Canada (52.4%). The Philippines was the second most common location of study for this field, accounting for nearly 9.2% of the total. Following the Philippines in popularity of location of study for this field were the United Kingdom, the United States, China and India, but none of them contributed more than 5% to the total.

A large proportion of PSE immigrants in computer and information sciences and support services completed their study in Canada (58.4%). Similar to the situation for immigrants in engineering, China ranked as the second most popular country of study for this field (7.5%).

More than 4 in 10 PSE immigrants with a degree in education had their highest education in Canada (44.1%). Among all the other main countries of study, the percentages in this field were relatively high for the Philippines (6.9%), the United States (6.6%) and India (6.6%).

Similar to graduates with an education degree, 45% of the immigrants with social sciences degrees had their highest education in Canada. India and the United States contributed 8.4% and 4.3% and ranked as the second and third most common countries of study in this field.

Conclusion

This study is the first part of a three part project using the 2006 Census micro data to examine interplaying associations between labour market outcomes and educational characteristics among PSE immigrants. It is mainly descriptive, drawing upon newly available information captured in the 2006 Census to look at statistical variations in country of highest educational attainment and field of study among PSE immigrants. First, comparisons were made of immigrant and Canadian-born demographic and educational profiles; this was followed, second, by an examination of highest level of educational attainment, location and field of study of PSE immigrants. Among the results of this profile were the following observations:

- In 2006, immigrants were more likely than the Canadian-born to have a bachelor's degree or university certificate or diploma above the bachelor level as their highest educational attainment. The concentration in higher education is more obvious for recent immigrant cohorts.
- There are some noticeable differences in distribution across fields of study among immigrants and the Canadian born (e.g., there were a larger proportion of immigrants who studied engineering compared to the Canadian-born).
- More than half of PSE immigrants attained their highest level of education in their country of birth. A significant proportion of recent and very recent immigrants obtained their highest degree in the leading source countries, e.g. China, India, and the Philippines. The shifts in countries of highest educational attainment across immigrant cohorts reflect the compositional changes in source country during the last two decades. Sizable proportions of non-US born PSE immigrants received their highest level of education in the United States.

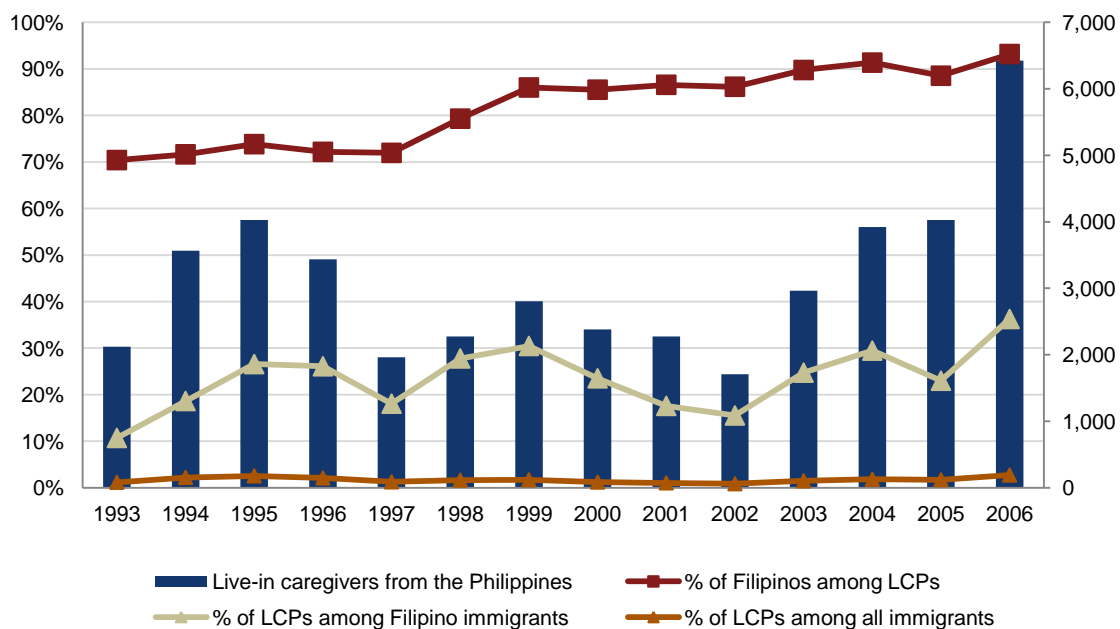
The next part of this project will explore employment and occupational outcomes by educational characteristics, the main focus being on the observable transferability of foreign degrees by field of study and country of highest post secondary degrees. The third and final part of this investigation will use multivariate analyses to separate out independent effects of country of study and field of study on occupational outcomes and earnings, controlling for other socio-demographic factors.

Appendix A: Filipino immigrants and Live-In Caregiver Program

Since 1993, the Live-In Caregiver immigration category accounted for a rising share of all Filipino immigrants (from 11% in 1993 to 36% in 2006), resulting from the introduction of the Live-in Caregiver Program in 1992. Live-in caregivers are individuals who are qualified to provide care for children, elderly persons or persons with disabilities in private homes without supervision. Both the employer and the employee must meet certain requirements to be eligible for the Live-In Caregiver Program. LCP program participants may apply for permanent residency from within Canada after being employed as caregiver for at least two years within three years immediately following their entry to Canada.

Filipinos have made up a significant share of the Live-In Caregivers in the last decade with 70% in 1993 and 93% in 2006. The jobs under this program essentially require secondary school education and correspond to NOC C occupations.

Chart A: Proportion of Filipinos among the live-in caregivers, proportion of live-in caregivers among Filipino immigrants, and annual landings of live-in caregivers from the Philippines



Source: RDM, Citizenship and Immigration Canada, 2010

Entry of Filipino women as live-in caregivers is also reflected in the gender composition of the immigrant flow coming from this country: they accounted for between 65% and 98% of all Filipino live-in caregivers during 1993-2006.