



Retaining International Students in Canada Post-Graduation: Understanding the Motivations and Drivers of the Decision to Stay

J U N E 2 0 1 8

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Over the last decade, the enrollment of international students at Canadian educational institutions has been rapidly increasing. For example, from 2010 to 2017 there was a 119 percent increase in the number of international students studying in Canada (Canadian Bureau for International Education, 2018).

This is not surprising given the recent commitment of the Canadian Government to increasing the number of international students studying in Canada, and the policies put into place to support this goal. In its 2014 International Education Strategy, the Government of Canada announced that it would work with the provinces and territories, Canadian educational institutions, and other stakeholders to double

the size of Canada's international student base from 239,131 in 2011 to more than 450,000 by 2022 (Government of Canada, 2014). Recent data on international students in Canada demonstrate that the Canadian Government has already achieved this target well before 2022. In fact, in 2017, there were 494,525 international students in Canada (Canadian Bureau for International Education, 2018).

The increasing number of international students has had a positive impact on the Canadian economy (Kunin & Associates, 2017). In particular, in 2015 and 2016 the total annual expenditures of international students, including their visiting families and friends, contributed \$12.8 billion and \$15.5 billion to economic activities in Canada (after accounting for Canadian scholarships and bursaries). In 2015, this translated into a \$10.5 billion contribution to Canada's GDP and, in 2016, a \$12.8 billion contribution to Canada's GDP. Further, international students' overall annual spending translated

into 140,010 jobs in 2015 and 168,860 jobs in 2016. Finally, international students' annual spending directly and indirectly contributed \$2.3 billion in tax revenue in 2015 and \$2.8 billion in 2016.

In addition to these economic contributions of international students, the Canadian government's commitment to increasing the number of international students has a further, immigration-related rationale. International students are seen as ideal candidates for permanent residency due to their proficiency in English and/or French, their Canadian education credentials, and their Canadian work experience (Immigration, Refugees and Citizenship Canada, 2017). This view of international students as an ideal source of skilled immigrants has been supported by policy changes made to ease international students' transition into permanent residency. These changes included, for example, increasing the allowable number of hours of paid work for international students, increasing the length of post-graduation work permits, developing specific provincial immigration programs directed at international

students (e.g., Ontario does not require international MA and PhD graduates to have a job offer to be eligible for the Provincial Nominee Program), allocating extra points for international students under Express Entry, and increasing the proportion of former international students invited to apply for permanent residency.

The ability to retain international students as permanent residents and skilled workers is especially critical for regions with a declining labour force. By retaining international students, these regions can rely on a new source of highly skilled labour that is able to contribute to the regions' growth and prosperity. The planned implementation in the three other Atlantic Provinces of Nova Scotia's "Study and Stay" program is just an example of the efforts directed toward increasing retention rates of international students where they are most needed. In order to promote higher retention rates of international students, it is important to understand the factors that determine international students' intention to stay in Canada and apply for permanent residency.

In this context, the goal of this project was to address the following questions: 1) What are prospective international students' expectations regarding their transition to permanent resident status in Canada? and 2) Once in Canada, what factors (demographic, economic, sociocultural, academic) predict international students' intentions to seek permanent residency and to work in Canada post-graduation? In particular, we focused on why international students wish to stay in Canada post-graduation, what the characteristics are of those who are especially likely to plan to apply for permanent residency, and what economic, socio-cultural, and academic factors drive the intention to apply for permanent residency.

To answer these research questions, we analyzed data from two surveys: a survey of prospective international students prior to their arrival in Canada (conducted by World Education Services) and a survey of international students at postsecondary institutions in Canada (conducted by the Canadian Bureau for International Education).

PROSPECTIVE INTERNATIONAL STUDENTS

Method

The survey of prospective students was sent via email to 9,000 individuals who contacted World Education Services for an educational assessment (ECA) during the period of June 2016 to September 2017. Data for the current survey were collected in October to November 2017. Responses were obtained from 1,161 individuals, which corresponds to a response rate of 11.8%. International student status was self-reported. In total, 287 respondents were classified as prospective international students. The majority of these international students were from India, Nigeria and Brazil, aligning with countries indicated as priorities for recruitment in CBIE's report on Canadian institutions' recruitment intentions (Canadian Bureau for International Education, 2016). Prospective international students were asked about their motivations to study in Canada and views about transitioning to permanent residents.

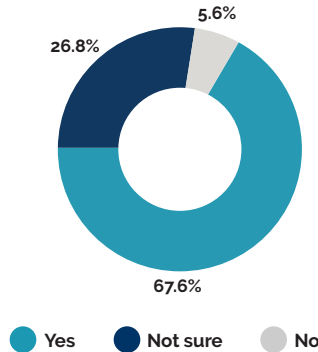
Results

The results of the survey show that prospective international students are highly motivated

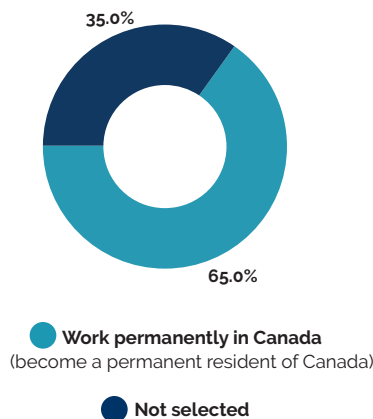
to stay in Canada and work here after graduation.

- A large percentage of prospective international students had plans to apply for permanent residency (68%) and to work in Canada after graduation (65%).

Prospective international students' plans to apply for permanent residency



Prospective international students' plans to work in Canada after graduation



- Prospective international students were motivated to apply for permanent residency after graduation

for two main reasons (which are not mutually exclusive). First, 52% of prospective international students plan to apply for permanent residency because Canada has better job opportunities than their home country. Second, 59% of prospective international students plan to apply for permanent residency because Canada has a better standard of living than their home country. These findings are consistent with previous research indicating that the source country of international students has an impact on international students' transition rates to permanent residency (Lu & Hou, 2015). In particular, previous research found that international students from countries with a lower GDP per capita had higher transition rates than international students from countries with a higher GDP per capita. It is not surprising, then, that international students who were especially likely to intend to apply for permanent residency were those who saw Canada as having better job opportunities and a higher standard of living than their home country.

- Of importance, 59% of international students who expressed plans to apply for

permanent residency expected to receive institutional help to make this transition. In particular, they expected that their educational institutions would help them create professional connections in Canada.

INTERNATIONAL STUDENTS IN CANADA

Method

The survey of international students in Canada was conducted by the Canadian Bureau for International Education (CBIE) in 2015. The goal of the survey was to assess how international students experience their education in Canada’s post-secondary institutions. In total, international students from 35 educational institutions of CBIE’s member institutions participated, including 20 universities, 11 colleges, and 4 polytechnic/institutes from nine provinces. Of the 35 educational institutions, four were Francophone, one was officially bilingual, and the remainder were Anglophone. Data were collected in April and May of 2015. In total, over 4,000 responses were obtained. The final sample used in the present study included 3424 complete responses, with the following countries of origin most

highly represented: China (19.3%), India (10.8%), France (10.7%), USA (9.3%), Brazil (4.6%), and Nigeria (4.1%).

The survey included questions about international students’ intention to seek permanent resident status in Canada (yes vs. no/not sure), and international students’ future employment plans (plans to work in Canada vs. no plans to work in Canada). The survey also included a number of questions assessing international students’ demographic characteristics (e.g., region of origin), economic characteristics (e.g., whether they relied on financial support from work income, a co-op or a paid internship), socio-cultural characteristics (e.g., type of friends in Canada – at least some Canadian friends versus only international students or students from their home country), and academic characteristics (e.g., field of study).

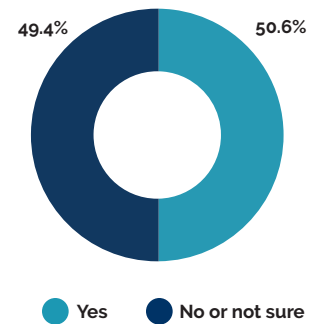
Results

The results of the survey show that once in Canada, international students are also highly motivated to stay in Canada and to work here after graduation.

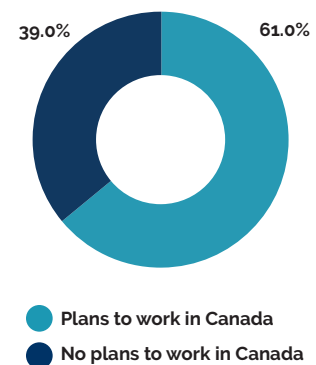
- A large percentage of international students have

plans to apply for permanent residency (50.6%) and to work in Canada after graduation (61.0%). These percentages are slightly lower than those reported by prospective international students, perhaps due to experiences once in Canada.

International students' plans to apply for permanent residency



International students' plans to work in Canada after graduation



- To examine what demographic, economic, socio-cultural, and academic factors drive international

students' intention to apply for permanent residency and to work in Canada after graduation, we conducted a series of logistic regressions. Logistic regressions are useful because they allow one to estimate the odds of a group with certain characteristics providing response A over response B compared to another group. For example, logistic regression allows one to make statements such as: International students from Africa are 3.72 times more likely to intend to apply for permanent residency (as opposed to not intend to do so or not sure) than international students from the USA.

Intentions to apply for permanent residency

Several variables significantly predicted international students' intentions to apply for permanent residency. These variables include:

Demographic variables

- Compared to international students from the USA, international students from Africa were 3.72 more likely to intend to apply for permanent residency ($p < .01$) and international students from the Middle East and

North Africa were 2.06 times more likely to intend to apply for permanent residency ($p < .01$).

Economic variables

- International students who relied on financial support from on-/off-campus work income, a paid internship or a co-op were 1.25 times more likely to intend to apply for permanent residency than international students who did not receive this type of financial support ($p < .05$).

Socio-cultural variables

- International students who reported that an important reason for choosing to study in Canada was the opportunity for working and staying in Canada were especially likely to intend to apply for permanent residency (odds ratio = 4.44, $p < .01$).

- International students who had Canadian students or a mixture of Canadian students and international students as friends were 1.44 times more likely to intend to apply for permanent residency than international students who had only other international students and/or students from their home countries as friends ($p < .01$).

- International students who saw Canada as a safe place to live were especially likely to intend to apply for permanent residency (odds ratio = 1.39, $p < .01$).

Academic variables

- International students who were attending a college or an institute were 1.44 times more likely to express the intention to apply for permanent residency than international students who were attending a university ($p < .05$).

- International students pursuing a degree in engineering were 1.34 times more likely to intend to apply for permanent residency than international students pursuing a degree in another field ($p < .05$).

- International students who studied in the Prairies were 1.5 times more likely to intend to apply for permanent residency than international students in BC ($p < .05$).

- International students who had previously studied in Canada were 1.81 times more likely to intend to apply for permanent residency than international students who had not previously studied in Canada ($p < .01$).

Plans to work in Canada after graduation

Several variables significantly predicted international students' future employment plans. These variables include:

Demographic variables

- Compared to international students from the USA, international students from Africa were 2.87 times more likely to plan to work in Canada after graduation ($p < .01$), international students from South Asia were 2.40 times more likely to plan to work in Canada after graduation ($p < .01$), international students from East Asia were 1.91 times more likely to plan to work in Canada after graduation ($p < .01$), and international students from the Middle East and North Africa were 1.66 times more likely to plan to work in Canada after graduation ($p < .05$).

Economic variables

- International students who relied on financial support from on-/off-campus work income, a paid internship or a co-op were 1.35 times more likely to plan to work in Canada after graduation than international students who did

not have this type of financial support ($p < .01$). Similarly, international students who relied on financial support from parents, relatives or guardians were 1.35 times more likely to plan to work in Canada after graduation than international students who did not rely on this type of financial support ($p < .05$).

Socio-cultural variables

- International students who reported that an important reason for choosing to study in Canada was the opportunity for working and staying in Canada were especially likely to plan to work in Canada after graduation (odds ratio = 3.64, $p < .01$).

- International students who saw Canada as a safe place to live were especially likely to plan to work in Canada after graduation (odds ratio = 1.30, $p < .05$).

Academic variables

- International students pursuing a degree in engineering were 1.6 times more likely to plan to work in Canada after graduation and international students pursuing a degree in business were 1.4 times more likely to plan to work in Canada after graduation than international students

pursuing a degree in another field ($p < .01$ and $p < .05$).

- International students who studied in the Prairies were 1.78 times more likely to plan to work in Canada after graduation than international students in BC ($p < .01$).

- International students who had previously studied in Canada were 2.07 times more likely to plan to work in Canada after graduation than international students who had not previously studied in Canada ($p < .01$).

Variables that did not predict intentions to apply for permanent residency or plans for employment after graduation

As important as the variables that *did* predict intentions to apply for permanent residency and plans for employment after graduation are those variables that did not show any effects. Of interest, there were no significant effects of gender, academic success, Canada's reputation as a reason for choosing to study in Canada (i.e., Canada is a safe and tolerant country with a good education system), and number of actions taken before arriving in Canada to prepare for studying here (e.g., planned a budget,

searched for accommodation, researched the region).

Relation between plans for employment and intention to apply for permanent residency in Canada

We also found a strong association between international students' plans to work in Canada after graduation and their intentions to apply for permanent residency, $\chi^2(1) = 1167.42$, $p < .001$. International students who intended to apply for permanent residency were especially likely to have plans to work in Canada after graduation. In addition, the variables that predicted international students' plans to work in Canada after graduation were very similar to those that predicted their intentions to apply for permanent residency. These variables included, for example, international students' region of origin, the importance of opportunities for working and staying in Canada as a reason for choosing to study in Canada, and the view that Canada is a safe place to live. Of note too, when predicting international students' intention to apply for permanent residency as well as their plans to work in Canada after graduation, socio-cultural and economic

factors explained much more variance than academic factors (after controlling for the demographic variables). This suggests that socio-cultural and economic factors are more important than academic factors when it comes to explaining why some international students intend to work and apply for permanent residency after graduation and others do not.

CONCLUSION AND IMPLICATIONS

Overall, this research indicates that a large proportion of prospective and current international students plan to work in Canada after graduation and intend to apply for permanent residency. While there may be variation depending on international students' country of origin, some of the reasons why international students intend to stay in Canada include better job opportunities and a higher standard of living in Canada. The strong relation between plans to work in Canada and intentions to apply for permanent residency suggest that those who are planning to stay will endeavour to work, thus further contributing to the Canadian economy.

In order to increase the retention of international students, the research suggests that efforts should be directed toward providing pre-arrival information to potential international students about the opportunities to work and stay in Canada. Efforts should also be directed at the integration of international students during their studies, including through facilitating friendships with Canadians and Canadian work experience. It is also important to ensure that the environment in which international students live is seen as safe, contributing to their desire to stay and work in Canada, and become permanent residents. Prospective international students seem to expect support from their educational institutions to secure employment after graduation, particularly in the form of assisting them to establish professional connections in Canada. To fulfill this expectation, mentorship and networking opportunities to build professional connections are crucial. Perhaps most importantly, employment opportunities for international students post-graduation are essential as part of any strategy designed to retain these individuals as a skilled

workforce in Canada long-term. Without meaningful work, these individuals are likely to move to greener pastures where their skills will be appreciated in the labour market.

This research is important in revealing critical factors

underlying international students' intentions to stay and work in Canada after graduation. The surveys are not able to address the more long-term outcomes of international students in Canada (e.g., in terms of success in achieving employment and obtaining

permanent residency), however, and this is the topic to which we plan to now turn our attention. This research will also focus on lessons learned and challenges that international students have encountered along the road to becoming fully integrated into Canadian society.

CBIE RESEARCH IN BRIEF

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The views expressed in this paper are those of the authors.

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REFERENCES

Canadian Bureau for International Education (2016). A world of learning 2016: Canada's performance and potential in international education. Retrieved from <http://net.cbie.ca/download/World-of-Learning-2016-EN.pdf>

Canadian Bureau for International Education (2018). Facts and figures. Retrieved from <https://cbie.ca/media/facts-and-figures/>

Government of Canada (2014). Canada's international education strategy. Harnessing our knowledge advantage to drive innovation and prosperity. Retrieved from <http://international.gc.ca/global-markets-marches-mondiaux/assets/pdfs/overview-aperçu-eng.pdf>

Immigration, Refugees and Citizenship Canada (2017). Annual report to Parliament on immigration. Retrieved from <https://www.canada.ca/content/dam/ircc/migration/ircc/english/pdf/pub/annual-report-2017.pdf>

Kunin, R., & Associates (2017). Economic impact of international education in Canada – an update. Retrieved from http://www.international.gc.ca/education/assets/pdfs/Economic_Impact_International_Education_in_Canada_2017.pdf

Lu, Y., & Hou, F. (2015). International students who become permanent residents in Canada. Retrieved from <http://www.statcan.gc.ca/pub/75-006-x/2015001/article/14299-eng.pdf>