To Stay or Return: Migration Intentions of Students from People's Republic of China in Saskatchewan, Canada

Yixi Lu · Li Zong · Bernard Schissel

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Abstract There is a growing policy concern in Canada regarding the facilitation of foreign students' transition from temporary residents to permanent residents. Interestingly, academic attention to the issue is somewhat lacking. By focusing on the Chinese undergraduate student at the University of Saskatchewan in Canada, this study attempts to identify the factors which influence their migration intentions. The findings confirm the important effects of students' demographic characteristics, premove traits, Canadian experiences, parental expectations, as well as related aspiration factors. In addition, we find that female and male students are different from each other in terms of the factors that determine their intentions to stay in Canada. In light of the findings, we suggest that, in spite of gender differences, social and emotional adaptations are as critical as economic adaptation in facilitating temporary residents' intentions to stay. Furthermore, we contend that changes in immigration policy to attract foreign students to stay do motivate their immigration intention to some extent, but we also recommend that extended research needs to be done to examine the effects of most recent policy changes on foreign students' intended or actual migration.

Résumé Une préoccupation en matière de politique prend de l'importance au Canada; elle porte sur la facilitation de la transition du statut des étudiants étrangers, de résidents temporaires à résidents permanents. Fait digne de remarque, cette question n'attire pas beaucoup d'attention de la part du monde académique. Cette étude tente d'identifier les facteurs qui influencent les projets de migration des étudiants asiatiques du premier cycle à la University of Saskatchewan, au Canada.

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B. Schissel e-mail: bernard.schissel@usask.ca Les résultats confirment le rôle important des traits démographiques des étudiants, des caractéristiques de leurs vies avant leur arrivée au Canada, de leurs expériences au Canada, des attentes de la part des parents, ainsi que des facteurs liés aux souhaits pour l'avenir. De plus, nous avons trouvé que les facteurs qui influencent le désir de rester au Canada ne sont pas les mêmes pour les étudiants que pour les étudiantes. Compte tenu des résultats, nous proposons que, malgré les différences entre les hommes et les femmes, l'adaptation sociale et émotive est aussi critique que l'adaptation économique comme facteur qui contribue à faciliter la décision des résidents temporaires de rester. Nous affirmons également que les changements apportés aux politiques en matière d'immigration pour motiver les étudiants étrangers à rester ont, dans une certaine mesure, l'impact voulu. Toutefois, nous recommandons des recherches plus poussées pour déterminer l'effet qu'ont la plupart des changements de politiques sur les intentions de migration des étudiants.

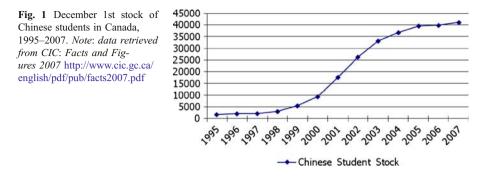
Keywords Chinese students · Migration intentions · Immigration · Gender · Immigration motivation

Mots clés étudiants chinois \cdot intentions en matière de migration \cdot immigration \cdot genre \cdot motivation à immigrer

Introduction

Since the late 1990s, competition for skilled workers and the internationalization of education have become fundamental to a successful knowledge economy, especially in the current globalization context. As a result, many developed industrial countries have experienced an inflow of scholastically skilled immigrants. A good portion of these immigrants have received their advanced education in the host country and often have chosen to become permanent residents during or after their educational experiences in the host country. Previous research on the phenomenon of decision making of migration has tended to focus on migration between a particular sending and receiving country (Lee et al. 2005; Li 2003; Massey 1994) or on international migration patterns in general (Castles and Miller 1993; Massey and Malone 2002; Quinn and Rubb 2005). Further studies have concentrated on the impact that the increased foreign student complement has had on the host country since they have become a main source of skilled workers, at both policy and practical levels (Finn 2003; Gao and Liu 1998; Massey and Malone 2002; Pang and Appleton 2004; Tremblay 2005).

We depart from the existent literature somewhat by focusing on the migration intentions of Chinese undergraduate students studying in Canada. The recruitment of foreign students as skilled migrants has become an increasingly important policy orientation in Canada. There are three main factors that make foreign students attractive migrants. First, graduates of Canadian institutions of higher education are more adaptive to the Canadian labor market than foreign graduates. Second, to cope with low birth rates and aging populations, young people who are at the beginning of their working lives are in high demand for sustaining the size of the working-age adult population. Third, the prospect of migration makes higher education in Canada more attractive to fee-paying foreign students who are active contributors to the internationalization of higher education in Canada.



The People's Republic of China (PRC) has become the second leading source country for foreign students in Canada since 1995. Figure 1 shows that the Chinese student stock¹ has increased constantly, and, by the end of 2002, it became the largest foreign student group in Canada (Citizenship and Immigration Canada 2005). Interestingly, the annual inflow of Chinese undergraduate students has continually exceeded the number of Chinese graduate students since 1999, and the gap between them has continually increased (Canadian Bureau for International Education 2005). In 2002, 4,775 Chinese students entered Canada to pursue undergraduate education, more than 2.5 times the number of Chinese students pursuing graduate education in Canada (Canadian Bureau for International Education 2005).

The Chinese undergraduate student group is not only significant because of its magnitude but also because it is somewhat different from the Chinese graduate student for several reasons. Firstly, a large majority of the Chinese undergraduate students in Canada are family-sponsored, rather than being sponsored by Canadian education institutions or the Chinese government. Secondly, they are relatively young and are, therefore, in a period of intellectual development that involves the learning of independence. Thirdly, as undergraduates, they are disadvantaged relative to their graduate student counterparts. Chinese students in graduate programs, more so than those in undergraduate programs, are able to collect specialty-related work experience during their study, and many of them have gained some work experience before moving to Canada. They have, as a consequence, a much better chance to apply for immigration even before graduation than those in undergraduate programs. The relative disadvantage experienced by undergraduate students from China may, however, be ameliorated in the future by recent policy changes (discussed later in the next section of "Immigration Policy and Foreign Students in Canada"). Given the relative disadvantage that Chinese undergraduate students face in immigrating to Canada, we seek to understand the factors that influence their intentions whether or not to become permanent residents. We also look at how immigration policies affect foreign students' immigration attitudes in general and how the immigration intentions of Chinese undergraduate students' are, in part, a response to particular immigration policies exemplified by the

¹ *Stocks*—the number of persons, identified as foreign students, present in the CIC system on a specific date in each year of *observation*. The date chosen was December 1st. For a foreign student to be counted as present in the foreign student stock, he or she must have a valid student authorization on that date (Citizenship and Immigration Canada 2009).

Saskatchewan Immigrant Nominee Program (SINP)² and the Off-Campus Work Permit Program³. Our research is based on a survey of Chinese students conducted at the University of Saskatchewan in 2005.

Immigration Policy and Foreign Students in Canada

Canadian immigration policy has responded to the reality that one of the critical factors, perhaps the most critical factor, in determining if a foreign student will be a successful skilled worker is work experience. Canada selects skilled immigrants based on a point system, which was created in 1967 and still exists although slightly altered. Since 2003, to be eligible as skilled worker, applicants need to collect at least 67 points in six aspects, including education, language, work experience, age, arranged employment, and adaptation. Work experience is the most determinative of all the factors—1-year of full-time paid work experience or equivalent is the minimum requirement. Before 2006, foreign students were not allowed to work off campus during study so they were restricted to three pathways to gain work experience before graduation: (1) work experiences gained in other countries, mainly in the home country; (2) on-campus work such as teaching or research assistantships; and (3) internships arranged by certain academic programs through the Co-op and Internship Program provided by Citizenship and Immigration Canada (CIC).

In terms of the three pathways mentioned above, the resultant relative difficulty that undergraduate foreign students experience has had two major implications. Firstly, their educational experiences in Canada have not been particularly advantageous given the general lack of Canadian work experience external to the university context. Secondly, foreign students who pursue undergraduate postsecondary degrees at a relatively young age, who have little work experience, and who have little opportunity in gaining work experience on campus, are even more disadvantaged compared to foreign students in postgraduate programs in applying for immigrant status before graduation. Although the postgraduation work program was designed to provide foreign graduates the opportunity to enter the Canadian labor market by issuing them 1-year work permits, the time limitation coupled with the long immigrant application process resulted in many foreign graduates losing ideal work opportunities.

The situation did, however, start to change in 2005. In May 2005, the postgraduation work program extended the length of work permits for foreign graduates from 1 to 2 years, and, in 2008, another reform extended the time to 3 years for all foreign graduates. Furthermore, now, some foreign students in postsecondary educational institutions, especially those with no negative results on their academic transcripts, are able to work off campus under the *Off-Campus Work Permit Program* announced in April 2006. In September 2008, the Canadian federal government announced a new immigration program, the Canadian Experience Class.

² Saskatchewan Immigrant Nominee Program (SINP) began in January 2005; it allows the Province of Saskatchewan to nominate applicants who are qualified to be landed immigrants under the criteria established by the province. The program can provide immigrant applicants with experiences or ties in Saskatchewan an alternate and quicker means of entry into Canada (Government of Saskatchewan 2005).

³ The Off-Campus Work Permit Program was officially launched in April, 2006. It allows certain foreign students to work off campus while completing their studies (Citizenship and Immigration Canada 2006)

To highlight Canadian experience in particular, the program allows temporary foreign workers and foreign students with at least 1 year of work experience in Canada after graduation to become permanent residents without having to file applications abroad (Citizenship and Immigration Canada 2008). The new program prioritizes foreign graduates of Canadian postsecondary educational institutions over immigration applications and provides the benefit of a shortened processing period for student migrants who are working or have ever worked in Canada.

The immigration policy changes in recent years imply a shift in government interest in foreign students as potential knowledge workers in the global competition for talent. Foreign students trained in Canada, in the eyes of Canadian policy makers, have a better chance to integrate into Canadian labor market than those without any Canadian experience. Apparently, this is not the only rationale behind recent shifts in policy. At a global level, the rapidly increasing mobility of highly educated people becomes an important feature as well as a consequence of the demands of globalization and the knowledge-based economy (Organization for Economic Cooperation and Development 2002; Thurow 1999). Since the early 1990s, many Western countries, including Canada, have experienced increasing labor market shortages which could not be ameliorated by domestic-born labor, contrary to popular belief (Beauchesne 2006; Green and Riddell 2001; Human Resources and Social Development Canada 2007, January). Therefore, the international skilled workforce has become a critical competitive labor pool for many developed Western countries as they struggle to maintain their economic development and quality of life. Foreign students are now widely considered to be a fertile source of qualified skilled workers (Tremblay 2005; Ziguras and Law 2006). Importantly, Western countries are not the only competitors for skilled workforces, as skilled workers are also highly demanded by emerging economic giants, such as India and China, who were, ironically, the traditional "senders" of skilled workers and foreign students (Awasthi and Chandra 1994; Liang and Morooka 2004).

Confronted with intense competition for skilled labor at a global level and severe labor shortage at a national level, Canada has generated new strategies to keep those who have arrived, especially foreign students studying in Canada. Importantly, the competition for scarce skilled labor does not only take place among nations but also among provinces and territories within Canada. Saskatchewan is one of the provinces that have typically attracted less skilled immigrants than neighboring provinces, especially those along the East and West coast. Now that Saskatchewan is facing an unprecedented economic boom coupled with the retirement of the baby boomer cohort, the prospects for a shortage of skilled labor grows. However, a huge backlog of applications delays the labor shortage relief (Riess 2008). Therefore, foreign students studying in Saskatchewan are in a particularly interesting position as they now study in a regional context with a serious shortage of skilled workers. They should have a relatively good chance of integrating into the labor market.

Theoretical Considerations

This study is different from conventional studies of international migration because it examines intentions regarding permanent settlement that arise from a condition of initial temporary migration. Indeed, the transition from temporary to permanent migration is of increasing policy significance (Finn 2003; Hawthorne 2005; Massey and Malone 2002; Ziguras and Law 2006), but, interestingly, there is little research on the transition process in both migration theory and in empirical studies of population mobility.

The work of Balaz et al. (2004) demonstrates strong links between initial temporary and eventual permanent migration, and Khoo et al. (2008) look into reasons behind temporary residents' decisions to become or not become permanent residents based on a survey of skilled temporary residents in Australia. Their findings confirm Balaz and his colleagues' argument and suggest that temporary migration is linked to permanent settlement in three ways: (1) temporary migration is assumed to be a pathway to permanent migration; (2) temporary migration can facilitate permanent residence due to migrants' adaptation experiences in destination; and (3) permanent migration is a premeditated available option for the future. They also identify differences between migrants from less developed countries and those from developed countries and indicate that migrants from less developed countries are more likely to fall into the first pattern relative to their counterparts from more developed countries. Conventional pull and push factors come into play here, including better employment opportunities, higher salaries, benefits for their children, and unpleasant economic and political situations in their home countries. Migrants from developed countries are more likely to take temporary migration as an opportunity to gain international experience or to settle permanently due to pleasant adaptation experiences in the destination country (typifying the second item above). By examining the ways in which temporary migration can link to permanent migration, their study provides important insights in explaining international migration; however, the analysis is still based on a generic pull-push model. Variations among migrants within a country or from less developed countries still need to be explored and the difference between migrants from less developed and developed countries is striking but a bit oversimplified.

Rather than talking in a generic way, about temporary residents' intention to leave or stay, Alberts and Hazen (2005) focus on a specific group of temporary residents, the foreign student in the USA. They identify three categories of factors based on an analysis of focus group interview data obtained from foreign students at the University of Minnesota. They categorize migration motivations as: "professional factors," a concern with wages, work conditions and facilities, and opportunities for professional advancement; "societal factors" including how comfortable the student feels in a particular social, political, and cultural environment; and "personal factors" as issues related to the personal circumstances of an individual, exemplified by family structure and friendship networks. The Chinese students in the Albert and Hazen study considered social and personal factors as important reasons to return to China, but, interestingly, their concerns regarding the insecure political situation and economic and environmental problems in China seemed to override societal and personal reasons and engender a commitment to stay in North America. Even though the transition from temporary to permanent migration is not a conventional topic in international migration studies, the conventional socioeconomic characteristics that are typical of most sound research in immigration cannot be overlooked. Socioeconomic considerations necessarily influence actual and intentional permanent migration of temporary residents. Since migration intentions are determined by a wide variety of factors as well as wider sociocultural contexts (Radu 2008), the most recent trends in international migration studies adopt multilevel models to frame the effects of individual characteristics, resources, and preferences, as well as social networks and social contexts in country of origin and destination, on migration intentions (Coleman 1990; Haug 2008).

In light of our literature review, we notice wide variations in and considerable uncertainty with the types of influences that are included in causal models of migration intentions and behaviors. We try to reduce the uncertainty in our research by focusing only on Chinese students in Canada, allowing us to control the social contexts of origin and destination. Because Chinese students are temporary residents in Canada already, we focus on whether they intend to become permanent residents in Canada and whether and how their experiences in Canada affect their migration intentions. Furthermore, we incorporate individual characteristics, resources, and aspirations as well as, family factors and social networks in China and Canada in our models of intention. Although causal models of students' migration intentions cannot predict how many students will actually stay (Baker and Finn 2003), they can provide insights into the factors that students consider as critical in making their decision and provide a context in which we can make a best guess at migration outcomes (Li et al. 1996).

Noticing the necessity of multilevel models, we include a wide variety of variables in the analysis of Chinese students' migration intentions and divide our discussion into two sections. "Section I: Influences of Demographic Characteristics, Premove Traits, and Canadian Experiences on Migration Intentions" examines the influences of students' demographic characteristics, premove traits, and Canadian experiences on their migration intentions. The demographic characteristics include gender and age. The premove traits include the variables related to family structure, family economic background, parents' educational level, and academic performances in China; the indicators of Canadian experience include year of residence in Canada, year of enrollment, academic performance, friendships in Canada, kinships in Canada, marital status, and social activity participation. In "Section II: Aspirations and Migration Intentions," we discuss aspiration factors, including personal educational and work aspirations and expectation of parents with respect to immigration. In these two sections of analysis, we attempt to identify prominent background, attitudinal, and behavioral factors that influence Chinese undergraduate students' migration intentions.

Data and Methods

The target population for this study is comprised of students who originally came from Mainland China and registered in undergraduate programs at the University of Saskatchewan for the fall term of 2005. The University of Saskatchewan is a Canadian university with a relatively high enrollment of foreign students. The University has witnessed a dramatic increase in Chinese students since 1995. In 1995, there were only five Chinese students enrolled in undergraduate programs; in the fall of 2005 (the survey period), the number had increased to 328.

Our survey was conducted from September to December 2005. The method was designed so that all Chinese undergraduate students would receive notice of the survey participation through mass emails, poster advertisements, and "word of mouth." One hundred and seventy-two Chinese undergraduate students voluntarily participated in the survey and 160 of them submitted valid questionnaires. Even though this study constitutes 49% of the total population of Chinese undergraduate students at the University of Saskatchewan, the findings must be qualified by such a meager sample size. According to the frequency distribution in Table 1, the gender ratio of the sample is 54:46 (male to female). The age range is primarily from 18 to 26; only 5% of sample population is older than 26 by September 30, 2005. We had fewer respondents from the first year and the last year. Likely, first-year students were less in touch with others than advanced students and student in the last years

| | Frequency | Percentage |
|--------------------------------|-----------|------------|
| Age | | |
| 18–20 | 12 | 7.5 |
| 21–23 | 102 | 63.3 |
| 24–26 | 38 | 24.2 |
| 27–29 | 7 | 4.3 |
| 30–31 | 1 | 0.6 |
| Total | 160 | 100.0 |
| Gender | | |
| Male | 87 | 54.5 |
| Female | 73 | 45.6 |
| Total | 160 | 100.0 |
| Year of residence in Canada | | |
| 1 year or less | 21 | 13.1 |
| 1–2 years | 19 | 11.9 |
| 2–3 years | 29 | 18.1 |
| 3–4 years | 45 | 28.1 |
| More than 4 years | 46 | 28.8 |
| Total | 160 | 100.0 |
| Year of enrolment | | |
| First year | 27 | 16.9 |
| Second year | 51 | 31.9 |
| Third year | 54 | 33.8 |
| Fourth year | 28 | 17.4 |
| Total | 160 | 100.0 |
| Migration intentions | | |
| Strong immigration intention | 55 | 34.4 |
| Moderate immigration intention | 85 | 53.1 |
| No immigration intention | 20 | 12.5 |
| Total | 160 | 100 |

 Table 1
 Personal characteristics

 in terms of age, gender, year of
 residence in Canada, year of

 enrolment, and migration
 intentions

were busy with school work or job hunting. At any rate, it was not easy to reach either cohort since student participation was voluntary.

The focus of this study is Chinese students' migration intentions. For most Chinese students, whether or not to stay permanently is not a decision which they have to make immediately upon arrival, so we identify three types of migration intention to capture this uncertainty, including "I strongly intend to obtain permanent residence in Canada," "I may apply for permanent residence, but am not quite sure yet," and "I have no intention to apply for permanent residence in Canada." The second level indicates a moderate immigration intention implying their inclination to stay permanently but also their lack of certainty. The other two categories are self-explanatory. As mentioned before, the analysis and discussion are divided into two sections. The first section involves developing a logistic regression model to explain students' migration intentions with respect to demographic characteristics, premove traits, and Canadian experiences. We introduce the logistic regression analyses with bivariate tables to give us a sense of the nature and direction of the associations before we test the complete causal model. The second section discusses the aspiration factors related to migration intentions by using cross tabular analysis.

Results and Discussion

Section I: Influences of Demographic Characteristics, Premove Traits, and Canadian Experiences on Migration Intentions

Table 2 presents the bivariate relationships among students' premove traits, demographic characteristics, Canadian experiences, and their migration intentions. Table 3 presents bivariate associations controlling for gender, given the welldocumented importance of gender in immigration research (Aroian et al. 2008; Donato et al. 2008; Hansen, 2008). The demographic variables include gender and age at the time of the survey. The factors considered as premove traits include whether they are an only child, parents' marital status, family financial situation, household monthly income, parents' educational level, parents' occupations, highest level of education in China, academic standing, and English proficiency on moving to Canada. For foreign students, as temporary residents in Canada, experiences in destination play an important role in making the decision to stay or return, so we include year of residence in Canada, marital status, intimate Chinese friend(s), intimate Canadian friend(s), relative(s) in Canada, homesickness, social activity participation, private activity participation, academic performance, year of enrollment, and work experiences in Canada, as variables which measure the Chinese students' Canadian experiences. Tables 2 and 3 present the bivariate relationships that are statistically significant.

Since "age at the time of the survey" and "year of residence in Canada" are interval ratio-level variables, we use t tests to examine the mean differences of age among each category of migration intention. From the t test results, we only find significant mean differences between "strong immigration intention" and "no immigration intention"; students who hold strong immigration intentions are slightly older than those who have no intention to immigrate on average (mean (strong)=

Number Strong Moderate No immigration Chiimmigration intention (%) immigration squared intention (%) intention (%) Gender Male 12.6 87 32.2 55.2 0.42 73 12.3 Female 37.0 50.7 Only child of parents No 31 35.5 51.6 12.9 0.063 Yes 128 34.4 53.9 11.7 Parents' marital status Married 146 55 5 6.086* 31 5 13.0 Other 14 64.3 28.6 7.1 Family financial situation Wealthv 29 48.3 34.5 17.2 12.025* 91 59.3 Comfortable 25.3 15.4 Adequate 40 45.0 52.5 2.5 Parents' educational level 50.0 10.5 Both less than postsecondary 38 39.5 2.258 27 29.6 63.0 7.4 One with postsecondary 93 32.3 52.6 15.1 Both with postsecondary Academic standing in China Top 75 41.4 31.0 27.6 13.034* 54 37 51.9 11.1 Above average 29 6.7 Around average 29.3 64.0 English proficiency in China 4 365 Basic level 25 24.068.0 8.0 Intermediate level 73 31.5 53.4 15.1 Achieved requirement 62 41.9 46.8 11.3 Intimate Chinese friend(s) 61 19.6 59.0 21.4 12.861** None/few Many 91 43.5 50.7 5.9 Intimate Canadian friends None 83 50.6 18.1 31.3 3.023 Yes 77 39.0 51.9 9.1 Relative(s) in Canada No 108 27.8 58.4 13.8 6.342* Yes 52 48.1 42.3 9.6 Marital status Single 139 30.9 57.6 11.5 8.385* Married/common law 21 57.1 23.9 19.0 Homesickness 100 39.6 50.5 9.9 13.456* Rarely

 Table 2 Bivariate relationship between migration intentions and influential factors including demographic characteristics, premove traits, and Canadian experiences

| | Number | Strong immigration intention (%) | Moderate immigration intention (%) | No immigration intention (%) | Chi- squared |
|------------------------------------|--------|----------------------------------------|------------------------------------------|------------------------------|-----------------|
| Sometimes | 47 | 27.7 | 63.8 | 8.5 | |
| Often | 12 | 25.0 | 33.3 | 41.7 | |
| Participate in social activities | | | | | |
| Never/rarely | 64 | 23.4 | 61.0 | 15.6 | 10.094* |
| Sometimes | 83 | 39.8 | 51.8 | 8.4 | |
| Often | 13 | 53.8 | 23.1 | 23.1 | |
| Academic performance in Canada | | | | | |
| Excellent (average above 85%) | 27 | 37.0 | 63.0 | 0.0 | 4.815 |
| Good (average between 70% and 85%) | 85 | 34.1 | 50.6 | 15.3 | |
| Fair or below (average below 70%) | 46 | 32.6 | 52.2 | 15.2 | |

Table 2 (continued)

*p<0.05, significance level; **p<0.01, significance level

22.89 compared to mean (no)=22.03, t (two-tailed)=1.967*). However, when we separate male and female students, the significant effect of age appears for males only (mean (strong)=23.34 compared to mean (no)=22.00, t (two-tailed)=2.314*). Furthermore, the year of residence in Canada does not show a significant effect. Overall, the t test results tentatively suggest that age may play a role in students' immigration intentions, especially among male students.

For the most part, the results in Table 2 are presented here as a background context to the discussions in Table 3 which discuss the associations within categories of gender. Before we discuss Table 3, however, we wish to indicate that the associations of "having intimate Canadian friend(s)" and "academic performance in Canada," either in Tables 2 or 3 are nonsignificant based on chi-squared; however, we do find a significant ordinal association of "intimate friends" based on gamma (G=0.319*) in Table 3. For "academic performance in Canada," we find a striking percentage distribution in Tables 2 and 3, in that all students whose average is above 85, labeled as excellent, have either strong or moderate intentions to stay permanently. As a result of these findings, we include both variables in the forthcoming logistic regression models.

As for the other associations of significance, the factors that influence intentions to migrate that are shared by both male and female students include parents' marital status, family financial situation, and their own marital status. Students from families with divorced, separated, or widowed parents are much more likely to have strong intentions to immigrate compared to students from intact families. Furthermore, the family financial situations of students of both genders are significantly related to their migration intentions; interestingly, the relationship appears somewhat curvilinear; we will specify this interaction through logistic regression analysis. In addition, although most of students are single, those who are married or have common-law partners are more likely to hold strong intentions to immigrate compared to students who never married.

| | Male | | | Female | | |
|--------------------------------|------------------------------------|-----------------------------------------------------------------------------------------------------|---------------------------------|---------------------------------------|--------------------------------------------------------------------|---------------------------------|
| | N Strong immigration intention (%) | Strong immigration Moderate immigration No immigration intention (%) intention (%) intention (%) | No immigration intention (%) | N Strong immigration intention (%) | Moderate immigration No immigration intention (%) intention (%) | No immigration intention (%) |
| Only child of parents | | | | | | |
| No | 20 25.0 | 60.0 | 15.0 | 11 63.6 | 36.4 | 0.0 |
| Yes | 67 35.8 | 53.7 | 10.4 | 62 32.3 | 53.2 | 14.5 |
| | Chi-squared=0.928 | | | Chi-squared=5.992* | | |
| Parents' marital status | | | | | | |
| Married | 74 24.3 | 9.09 | 15.1 | 65 30.7 | 55.5 | 13.8 |
| Other | 13 76.9 | 23.1 | 0.0 | 8 87.5 | 12.5 | 0.0 |
| | Chi-squared=13.013** | | | Chi-square=9.876** | | |
| Family financial situation | | | | | | |
| Wealthy | 14 42.9 | 42.8 | 14.3 | 15 56.2 | 25.0 | 18.8 |
| Comfortable | 52 19.2 | 65.4 | 15.4 | 39 37.2 | 48.8 | 14.0 |
| Adequate | 21 57.1 | 38.1 | 4.8 | 19 27.3 | 72.7 | 0.0 |
| | Chi-squared=11.120* | | | Chi-squared=9.883* | | |
| Parents' educational level | | | | | | |
| Both less than postsecondary | 19 42.1 | 57.9 | 0.0 | 19 36.8 | 42.1 | 21.1 |
| One with postsecondary school | 15 33.3 | 66.7 | 0.0 | 12 27.3 | 63.3 | 9.1 |
| Both with postsecondary school | 52 28.8 | 50.5 | 20.7 | 41 36.6 | 53.7 | 9.8 |
| | Chi-squared=9.674* | | | Chi-squared=2.336 | | |
| Academic standing in China | | | | | | |
| Top | 15 46.7 | 20.0 | 33.3 | 14 35.7 | 42.9 | 21.4 |
| Above average | 29 31 | 51.8 | 17 2 | 25 44.0 | 52.0 | 10 |

| Around average | 43 27.9 | 69.8 | 2.3 | 32 31.2 | 56.2 | 12.5 |
|------------------------------|--------------------------------|------------|------|--------------------|------|------|
| | Chi-squared=15.504** | *: | | Chi-squared=3.460 | | |
| English proficiency in China | | | | | | |
| Basic level | 18 16.7 | 72.2 | 11.1 | 7 35.7 | 42.9 | 21.4 |
| Intermediate level | 39 23.1 | 59.0 | 17.9 | 25 44.0 | 52.0 | 4.0 |
| Achieved requirement | 30 53.3 | 40.0 | 6.7 | 32 31.2 | 56.2 | 12.5 |
| | Chi-squared=10.573* | | | Chi-squared=1.849 | | |
| Intimate Chinese friend(s) | | | | | | |
| None/few | 33 17.9 | 57.1 | 25.0 | 28 17.9 | 57.1 | 25.0 |
| Many | 53 47.4 | 47.4 | 5.3 | 38 47.4 | 47.3 | 5.3 |
| | Chi-squared=4.619 | | | Chi-squared=8.933* | | |
| Intimate Canadian friends | | | | | | |
| None | 46 28.3 | 50.0 | 21.7 | 37 35.1 | 51.4 | 13.5 |
| Yes | 40 40.0 | 52.5 | 7.5 | 37 37.8 | 51.4 | 10.8 |
| | Chi-squared=3.77; gamma=0.319* | mma=0.319* | | Chi-squared=0.148 | | |
| Relative(s) in Canada | | | | | | |
| No | 64 23.4 | 62.5 | 14.1 | 44 36.4 | 52.3 | 11.4 |
| Yes | 23 56.5 | 34.8 | 8.7 | 29 37.9 | 48.3 | 13.8 |
| | Chi-squared=8.496* | | | Chi-squared=0.150 | | |
| Marital status | | | | | | |
| Single | 73 26.0 | 60.3 | 13.7 | 66 9.1 | | 36.4 |
| Married/common-law | 14 64.3 | 28.6 | 7.1 | 7 42.9 | | 42.9 |
| | Chi-squared=7.882* | | | Chi-squared=7.949* | | |
| Homesickness | | | | | | |
| Rarely | 58 34.5 | 53.4 | 12.1 | 43 46.5 | 46.5 | 7.0 |
| Sometimes | 26 26.9 | 61.5 | 11.5 | 21 28.6 | 9.99 | 4.8 |
| Often | 3 66.7 | 33.3 | 0.0 | 9 11.1 | 33.3 | 55.6 |

| | Male | | | Female | | |
|--------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|---------------------------------|------------------------------------|------------------------------------|---------------------------------|
| | N Strong immigration Moderate immigration No immigration No immigration intention (%) intention (%) intention (%) intention (%) intention (%) | Moderate immigration intention (%) | No immigration intention (%) | N Strong immigration intention (%) | Moderate immigration intention (%) | No immigration intention (%) |
| | Chi-squared=2.187 | | | Chi-squared=20.441* | | |
| Participate in social activities | | | | | | |
| Never/rarely | 37 18.9 | 59.5 | 21.6 | 27 29.6 | 63.0 | 7.4 |
| Sometimes | 42 35.7 | 59.5 | 4.8 | 41 43.9 | 43.9 | 12.2 |
| Often | 8 75.0 | 12.5 | 12.5 | 5 20.0 | 40.0 | 40.0 |
| | Chi-squared=14.073* | | | Chi-squared=6.240 | | |
| Academic Performance in Canada | | | | | | |
| Excellent (average above 85%) | 10 50.0 | 50.0 | 0.0 | 17 29.4 | 70.6 | 0.0 |
| Good (average between 70% and 85%) 45 28.9 | 45 28.9 | 55.5 | 15.6 | 40 40.0 | 44.5 | 15.0 |
| Fair or below (average below 70%) | 32 34.4 | 53.1 | 12.5 | 14 28.6 | 50.0 | 21.4 |
| | Chi-squared=2.731 | | | Chi-squared=5.283 | | |
| p<0.05, significance level; ** $p<0.01$, significance level | significance level | | | | | |

Table 3 (continued)

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Significant gender differences appear as well. In addition to the significant effect of age as mentioned before, for male students, it seems that academic performance (indicated by academic standing and English proficiency in China⁴), parents' educational level, relative(s) in Canada, and participation in social activities are important factors influencing migration intentions; however, this appears not so for females. For females, variables like whether they are an only child, whether they have intimate Chinese friends, and how often they feel homesick are relatively important factors.

Table 4 presents three logistic regression models which include all the variables of significance or importance in the previous bivariate analyses and, as before, gender is controlled. The "goodness-of-fit" statistic indicates that all three models fit the data adequately, and the significant model chi-squared show that the independent variables in the models do make a difference in predicting the odds of migration intention. Each model consists of a comparison between "strong immigration intention" and "no immigration intention" as well as a comparison between "strong immigration intention" and "moderate immigration intention." The logistic regression models confirm most of the significant relationships shown in Tables 2 and 3. Both male and female students are significantly influenced by family financial situation and parents' marital status in terms of their migration intentions (interestingly, students' marital status is excluded from Table 4 as its significance disappears when all variables are considered simultaneously). Parents' marital status has a similar effect on female and male students' migration intentions; students who come from families without two cohabiting parents are more likely to have a strong immigration intention rather than moderate intention compared to students from families with two parents. However, for the rest of the regression models, the significant influences show general differences between males and females.

For males, for both age indicators, being older increases the odds of strongly intending to immigrate. Among premove traits, male students who were top students in China are more likely to strongly intend to stay compared to academically average students. Furthermore, meeting the university's requirement of English proficiency increases the odds of strongly intending to immigrate in comparison to students who only have a basic or intermediate proficiency. In addition, male students from adequate families are more likely to have strong intentions to immigrate compared to students who are from relatively wealthy families. As with financial situation, we see a negative relationship with parents' education in which male students whose parents have the lowest combined education are most likely to want to stay. Among Canadian experience variables, having close friend(s) who are Canadian increases the odds of having strong immigration intentions for male students. In addition, male students with family networks, such as having relative(s), wife, or common-law partner, are more likely to hold strong intentions to stay permanently rather than

⁴ The measurement of "English proficiency in China" combines two indicators: whether a student needed language training before entering University in Canada and their grades of entrance exam when getting into language training program in Canada (English-as-Second-Language program). The students who were able to enter University without language training are considered as achieving university's requirement, and the students who needed language training program in order to get into university are classified into two levels based on their grades of entrance exam: relatively high grades are labeled as the intermediate level, and relatively low grades are labeled as the basic level.

| | Model for a | 11 | Female m | odel | Male model | |
|---------------------------------------------|-------------|-------|----------|-------|------------|--------|
| Independent variables | В | Odds | b | Odds | В | Odds |
| Strong versus no | | | | | | |
| Age | 0.872* | 2.595 | | | 1.076* | 3.186 |
| English proficiency in China | | | | | | |
| Basic level | | | | | -2.411* | 0.090 |
| Intermediate level | | | | | -1.787* | 0.167 |
| Achieved requirement ^a | | | | | | |
| Family financial situation | | | | | | |
| Wealthy | -1.486 | 0.155 | | | -0.527 | 0.484 |
| Comfortable | -2.004* | 0.135 | | | -2.202* | 0.111 |
| Adequate ^a | | | | | | |
| Parents' educational level | | | | | | |
| Both lower than postsecondary | | | | | 2.147* | 8.547 |
| One lower than postsecondary | | | | | 2.057* | 7.825 |
| Both at postsecondary or above ^a | | | | | | |
| Academic standing in China | | | | | | |
| Top 5% | | | | | 0.208* | 1.231 |
| Above average | | | | | 1.328 | 3.773 |
| Around average ^a | | | | | | |
| Intimate Canadian friends | | | | | | |
| None | -2.299** | 0.100 | | | -1.602* | 0.202 |
| Yes ^a | | | | | | |
| Intimate Chinese friend(s) | | | | | | |
| None/few | -1.818* | 0.162 | -3.061* | 0.049 | | |
| Many ^a | | | | | | |
| Homesickness | | | | | | |
| Rarely | 1.034* | 2.813 | 2.304* | 9.980 | | |
| Sometimes | 1.488* | 4.426 | 1.784 | 5.952 | | |
| Often ^a | | | | | | |
| Strong vs moderate | | | | | | |
| Independent variables | | | | | | |
| Family financial situation | | | | | | |
| Wealthy | | | 1.886* | 6.579 | -1.778 | 0.169 |
| Comfortable | | | 0.947 | 2.577 | -2.915** | 0.054 |
| Adequate ^a | | | | | | |
| Academic standing in China | | | | | | |
| Top 5% | 1.871** | 6.493 | | | 3.023** | 19.607 |
| Above average | 0.800* | 2.227 | | | 1.889* | 6.622 |
| Around average ^{a*} | | | | | | |
| Only child of parents or not | | | | | | |

 Table 4
 Logistic regression showing logits and odds of migration intentions (strong, moderate, no) associated with demographic characteristics, premove traits, and Canadian experiences

Table 4 (continued)

| | Model for a | 11 | Female m | odel | Male model | |
|----------------------------------|-------------|-------|----------|-------|------------|-------|
| Independent variables | В | Odds | b | Odds | В | Odds |
| No | | | 2.010* | 7.465 | | |
| Yes ^a | | | | | | |
| Parents' marital status | | | | | | |
| Married | -1.617* | 0.198 | -2.278* | 0.103 | -1.926* | 0.146 |
| Others ^a | | | | | | |
| Intimate Chinese friend(s) | | | | | | |
| None/few | -1.166* | 0.312 | -1.872* | 0.153 | | |
| Many ^a | | | | | | |
| Relative(s) in Canada | | | | | | |
| No | -0.723* | 0.485 | | | -1.593* | 0.203 |
| Yes ^a | | | | | | |
| Homesickness | | | | | | |
| Rarely | | | 1.385* | 3.997 | | |
| Sometimes | | | -0.448 | 0.639 | | |
| Often ^a | | | | | | |
| Participate in social activities | | | | | | |
| Never/rarely | -2.106** | 0.122 | | | -4.469** | 0.012 |
| Sometimes | -1.323* | 0.266 | | | -3.871* | 0.021 |
| Often ^a | | | | | | |
| Number of cases | 152 | | 66 | | 86 | |
| -2log likelihood | 220.602 | | 89.705 | | 85.478 | |
| Chi-squared | 256.439 | | 96.230 | | 160.408 | |
| Model chi-squared | 77.459** | | 39.754* | | 81.823** | |

*p<0.05, significance level; **p<0.01, significance level

^a Reference category

moderate intentions compared to those who have no such networks; further, if they often participate in social activities, male students would be most likely to have strong intention to stay permanently against the comparison category of moderate intention. Here, social activity refers to social events on and off campus, volunteer services, and involvement of student organizations.

The female model in Table 4 shows influences that are unlike those for males. For example, female students from wealthy families have stronger intentions to stay than the students from adequate families. This finding is the opposite of what we found for the male model. Furthermore, again unlike the results for males, being an only child has a significant influence on intentions. Female students who have sibling(s) are more likely to strongly intend to stay than those students who are the only children. While the majority of our respondents are the only children as they are the generations born under the restriction of the one-child policy in China, we find in Table 3 that all the female students who have siblings have either strong or moderate

intentions to immigrate. Among Canadian experience factors, having more intimate Chinese friend makes female students strongly willing to immigrate, while having intimate Canadian friends shows no significant influence. Furthermore, if they often feel homesick in Canada, female students may have relatively weak or no intentions to apply for permanent residency compared to those who rarely feel homesick.

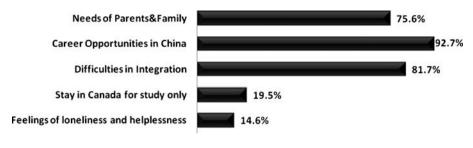
Interestingly, gender differences appear not only for causal influences, in general, but also across the three categories of the dependent variable. In the comparison between "strong immigration intention" and "no immigration intention", for male students, background characteristics including age, family financial situation, and parents' education level and human capital factors such as English proficiency in China and academic standing in China, as well as intimate Canadian friend(s) as a variable measuring ability or effort to create social networks, are critical factors. For female students, their strong intentions versus their no intentions are likely to be affected by whether they have intimate Chinese friend(s) and degree of homesickness, basic emotional/relational factors. When we attempt to understand why some students have strong immigration intentions compared to moderate intentions, it seems that again male students are affected by the factors which relate to family financial situation and academic standing in China, parents' marital status as a background factor, relative(s) in Canada as a social network factor, and social activity participation as an adaptability factor. For female students, besides intimate Chinese friend(s) and homesickness, family financial background and family structure factors are influential in distinguishing those with strong intentions compared to those with moderate intentions. While these latter comparisons (strong versus moderate) may be less determinative than those based on strong versus no intention, they augment findings that appear to be consistent across models.

On balance, for males, on the one hand, family background factors and human capital factors are relatively determinative in deciding whether or not to immigrate less advantaged family backgrounds appear to impede intentions to return; on the other hand, social network and adaptability factors are more likely to influence the intensity of immigration intention. For females, emotional/relational bonds in Canada and/or China are major concerns in deciding whether to stay permanently. Furthermore, family background factors appear to influence the intensity of immigration intention, exemplified by family financial viability which is a strong encouragement to stay. In summary, male students seem more concerned about the factors affecting their future development, such as family background, human capital, and social networks, while female students are most likely to take into account social/family concerns—belonging and support. These findings are reinforced by the descriptive results from the survey questions that tapped the respondents' reasons for returning to China. The results are listed in Figs. 2 and 3.

It appears that increasing career opportunities in China compel males to return more so than females, while parents and family concerns tend to pull females back to China and difficulties in integration tend to push them back more so than their male counterparts.

Section II: Aspirations and Migration Intentions

Migration intention is not an independent aspiration but is associated with individuals' other aspirations, both long term and short term. Migration can be a



■ Total % (N = 82)

Fig. 2 Reasons behind intention to return

mechanism to achieve certain goals but it is also the result of a premediated plan involving other relevant aspirations and these aspirations are, in part, the result of parental aspirations. In this section, we study aspirations which are connected to students' migration intentions; they include decisions: to stay permanently in Canada before migration; to look for off-campus work under the Off-Campus Work Permit *Program*; in postgraduate development, to work in Saskatchewan or not; and to consider parents' aspirations for their children. Unlike the previous section, we do not intend to develop a multivariate logistic regression model since we only attempt to find out in what way each aspiration factor is associated with students' migration intentions, so only bivariate relationships between these aspiration variables and students' migration intentions (Table 5) are presented and then controlled by gender (Table 6). Table 5 provides a generic understanding of the relationships between aspiration factors and migration intentions, and Table 6 helps us know further about the gender differences implicated in these relationships. We use gamma to measure generic trend of the associations and explain them through descriptive analysis since all the significant relationships show strong ordinal associations; the descriptive percentage distributions can elicit relatively straightforward explanations in this case.

As expected, students' current migration intentions (during the survey period) for the entire sample are strongly associated to whether they aspired to stay permanently in Canada before the move. Table 5 shows that, among the students who reported

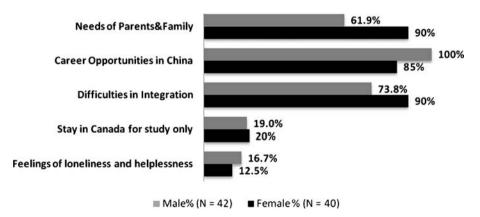


Fig. 3 Reasons behind intention to return by gender

yes that they had intended to stay in Canada premove, 70.8% of them feel strongly about staying and no one changed their mind after staying in Canada for a period of time. This finding echoes the results in some current literature that higher education can be an immigration path for students from less developed countries (Massey and Malone 2002; Pang and Appleton 2004). Among the 136 respondents who reported no immigration intention before moving to Canada, more than half of them reported a moderate immigration intention at the time of the survey, and about 30% of them reported a strong intention to stay permanently.

In Table 6, we find interesting gender commonalities. Generally speaking, although the majority of students had no intention to stay in Canada before they moved, applying for permanent residency definitely becomes an important option for them while completing their study in Canada (Balaz et al. 2004). This reality was further illustrated by the association between respondents' intentions to look for off-campus work under the *Off-Campus Work Permit Program* and migration intentions. As we mentioned before, foreign students in postsecondary educational institutions are able to work off campus under this program⁵. Tables 5 and 6 illustrate that the relationship between students' interest in looking for off-campus work and their intention to immigrate are positive and strong for both female and male groups (*G* (overall)=0.747; *G* (female)=0.794; *G* (male)=0.708). The popularity of the off-campus policy not only indicates the desire of students to stay permanently.

The local context also appears to have a bearing on intentions to stay permanently in Canada. We analyzed whether the respondent's aspirations to work in Saskatchewan influences their intentions to become permanent residents. From Table 5, the percentage distributions and significant Gamma value indicate that the students who are willing to work in Saskatchewan, specifically, are more likely to intend to become permanent residents in Canada than those who do not wish to work in the province. Table 6 shows that this relationship is only significant for male students; however, even for female students, all of those who reported Saskatchewan as their first choice of work destination either have a strong or moderate intention to immigrate. Even though Saskatchewan has never been a preferred place of settlement for new immigrants, relative to the larger centers in Canada, it appears that, after students have been studying in the province for a period of time, they tend to adapt and become inclined to remain. This change of heart may be influenced by immigration policy at the provincial level, such as the SINP which emphasizes Saskatchewan experience as an important advantage in applying for permanent residence—one of the survey questions revealed that about 40% of respondents had heard of or knew about this program, and some of them have intended to apply for permanent residence through it.

Interestingly, postgraduate aspirations influence intentions to immigrate only for the male student group, and, here, it seems that the students who plan to enter graduate programs or who plan to look for work are more interested in becoming permanent residents than those who want to pursue another bachelor degree in a

⁵ The Off-Campus Work Permit Program was officially launched in April 2006, but this policy was already well-known by the general public when this survey was conducted in the fall of 2005.

| | Number | Strong immigration intention (%) | Moderate immigration intention (%) | No immigration intention (%) | Gamma | Chi- squared |
|-------------------------------|---------|----------------------------------------|------------------------------------------|------------------------------------|--------|-----------------|
| Immigration aspiration premo | ove | | | | | |
| None | 136 | 28.5 | 56.9 | 14.6 | 0.618* | 17.025* |
| Yes | 24 | 70.8 | 29.2 | 0.0 | | |
| Parental attitudes to immigra | tion | | | | | |
| Oppose | 22 | 13.6 | 77.3 | 9.1 | 0.609* | 44.783* |
| No particular opinion | 98 | 22.2 | 6.6 | 16.2 | | |
| Strongly encourage | 40 | 77.5 | 17.5 | 5.0 | | |
| Educational aspiration | | | | | | |
| Undergraduate | 43 | 32.6 | 48.8 | 18.6 | 0.034 | 6.553 |
| Master's | 96 | 36.1 | 56.7 | 7.2 | | |
| Ph.D. | 21 | 33.3 | 42.9 | 23.8 | | |
| Postgraduate aspirations | | | | | | |
| Change major | 13 | 30.8 | 38.4 | 30.8 | 0.047 | 4.403 |
| Pursue graduate study | 70 | 35.7 | 54.3 | 10.0 | | |
| Look for job | 75 | 34.7 | 53.3 | 12.0 | | |
| Intention to look for off-cam | pus job | | | | | |
| Not interested | 10 | 10.0 | 30.0 | 60.0 | 0.747* | 44.699* |
| A little bit interested | 41 | 7.3 | 73.2 | 19.5 | | |
| Very much interested | 109 | 47.7 | 46.8 | 5.5 | | |
| Whether want to work in SK | | | | | | |
| No | 40 | 17.5 | 50.0 | 32.5 | 0.511* | 25.550* |
| Yes, but not the first choice | 91 | 35.9 | 57.6 | 6.5 | | |
| Yes, SK as the first choice | 29 | 55.2 | 41.4 | 3.4 | | |

 Table 5
 Bivariate relationship between migration intentions and relevant aspiration factors

*p<0.05, significance level; **p<0.01, significance level

different major. Further, it is significant that, for both Tables 5 and 6, the highest level of education to which students aspire is not related to their intentions. It appears that educational aspirations are not critical in the decision to immigrate.

Lastly, we focus on parental expectations given that the parent-child relationship is the likely most intimate interpersonal relationship for our respondents, a relationship whose influence extends well back before any decisions to migrate were made. It is not difficult to find literature that focuses on how Chinese parents influence adolescent decision-making processes (Feldman and Rosenthal 1991; Lin and Fu 1990; Peterson et al. 2002; Xia et al. 2004). A body of research has identified the importance of commonly held values including obedience to parents and the aversion for disagreement and negotiation with parents (Xia et al. 2004). Because our research population is comprised of Chinese undergraduate students in Canada, we know that almost all of them are still financially dependent on their parents for tuition fees and living costs. This economic reliance should dictate that decisions about immigration are heavily influenced by parents, especially if the decision will

| Table 6 Bivariate relationship between migration intentions and relevant aspiration factors by gender | ip bet | ween migration intention | ns and relevant aspiration | factors by gender | | | | |
|-------------------------------------------------------------------------------------------------------|--------|-------------------------------------|------------------------------------|---------------------------------|--------|-------------------------------------|-----------------------------------------------------------------|---------------------------------|
| | Male | lle | | | Female | ale | | |
| | N | Strong immigration intention (%) | Moderate immigration intention (%) | No immigration intention (%) | N | Strong immigration intention (%) | Moderate immigration No immigration intention (%) intention (%) | No immigration intention (%) |
| Immigration aspiration premove | ove | | | | | | | |
| None | 74 | 74 26.7 | 58.6 | 14.7 | 62 | 30.6 | 54.8 | 14.5 |
| Yes | 13 | 13 69.2 | 30.8 | 0.0 | 11 | 72.7 | 27.3 | 0.0 |
| | Gaı | Gamma=0.742**; chi-squared=9.579** | rred=9.579** | | Gam | Gamma=0.734**; chi-squared=7.471 | ured=7.471 | |
| Parental attitudes to immigration | tion | | | | | | | |
| Oppose | 13 | 15.4 | 86.6 | 0.0 | 6 | 11.1 | 66.7 | 22.2 |
| No particular opinion | 54 | 54 21.8 | 61.8 | 16.4 | 44 | 22.7 | 61.4 | 15.9 |
| Strongly encourage | 20 | 20 75.0 | 15.0 | 10.0 | 20 | 80.0 | 20.0 | 0.0 |
| | Gaı | Gamma=0.475**; chi-squared=24.821** | ared=24.821** | | Gam | Gamma=0.750**; chi-squared=22.849* | tred=22.849* | |
| Educational aspiration | | | | | | | | |
| Undergraduate | 23 | 34.8 | 52.2 | 34.8 | 20 | 30.0 | 45.0 | 25.0 |
| Master's | 50 | 33.3 | 60.8 | 5.9 | 46 | 39.1 | 52.2 | 8.7 |
| Ph.D. | 14 | 28.6 | 35.7 | 35.7 | 7 | 42.9 | 57.1 | 0.0 |
| | Gaı | Gamma =-0.148; chi-squared=9.22 | red=9.221 | | Gam | Gamma=0.281; chi-square=4.552 | =4.552 | |

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| Postgraduate aspiration | | | | | | | | |
|--------------------------------------|--------|-------------------------------------|-----------------|------|---------|------------------------------------|---------------|-------|
| Change major | 6 | 11.1 | 44.4 | 44.4 | 4 | 75.0 | 25.0 | 0.0 |
| Pursue graduate study | 37 | 36.8 | 52.6 | 10.5 | 32 | 34.4 | 56.2 | 9.4 |
| Look for job | 38 | 34.2 | 57.9 | 7.9 | 37 35.1 | 35.1 | 48.2 | 16.2 |
| | Gam | Gamma=0.234; chi-squared=9.589* | red=9.589* | | Gamı | Gamma=0.281; chi-squared=3.576 | red=3.576 | |
| Intention to look for off-campus job | doj su | | | | | | | |
| Not interested | 8 | 12.5 | 37.5 | 50.0 | 3 0.0 | 0.0 | 0.0 | 100.0 |
| A little bit interested | 22 | 4.5 | 81.8 | 13.6 | 19 | 10.5 | 63.2 | 26.3 |
| Very much interested | 57 | 47.4 | 45.6 | 7.0 | 51 | 51 49.0 | 48.1 | 1.9 |
| | Gam | Gamma=0.708**; chi-squared=24.450** | juared=24.450** | | Gamı | Gamma=0.794**; chi-square=26.251** | uare=26.251** | |
| Whether want to work in SK | | | | | | | | |
| No | 23 | 8.7 | 52.2 | 39.1 | 17 | 17 29.4 | 47.1 | 23.5 |
| Yes, but not the first choice | 45 | 34.8 | 63.0 | 2.2 | 46 37.0 | 37.0 | 52.2 | 10.9 |
| Yes, SK as the first choice | 19 | 57.9 | 36.8 | 5.3 | 10 | 50.0 | 50.0 | 0.0 |
| | Gan | Gamma=0.654**; chi-squared=27.233** | uared=27.233** | | Gam | Gamma=0.302; chi-squared=3.829 | red=3.829 | |
| | | | | | | | | |

*p<0.05, significance level; **p<0.01, significance level

have a significant impact on their future. Based on our survey, about 45% of respondents considered meeting parents' expectation as one of their top two motivations to study abroad. In Tables 5 and 6, parental attitudes have a significant and strong relationship with the students' migration intentions (G (overall)= 0.609**). Parents who strongly encourage students to immigrate have children with high aspirations to stay in Canada. Interestingly, though, a sizeable number of students whose parents oppose their immigration still have moderate immigration intentions. In the end, however, parental attitudes are strongly associated with students' migration intentions, and an interesting qualification to this relationship is that parental influence is stronger for females than males (G (female)=0.751**, G (male)=0.475**).

Conclusion

From the results of the logistic regression models in "Section I: Influences of Demographic Characteristics, Premove Traits, and Canadian Experiences on Migration Intentions," we show that demographic characteristics, premove traits, and Canadian experiences all influence students decisions to immigrate. Family characteristics, both family structure and family finances, are important factors influencing migration intentions. Students from families without two cohabiting parents appear to be relatively independent from family and highly motivated to move. Family economic background similarly plays a role in students' migration intentions but the influences are qualified by gender. Male students from adequate family backgrounds are likely to pursue independence and build their careers in Canada while this is true for females from wealthy families. Females from adequate family financial backgrounds are relatively hesitant to choose to stay in Canada. We also looked into whether current academic performance influences migration intention. Although the male-female difference is not significant, we do notice that top students, both males and females with an average above 85%, have a strong or moderate intention to stay.

Further gender differences in this study are striking. For demographic and premove factors, it seems that male students' migration intentions are more likely to be influenced by their age and by the human capital they have gained, including English proficiency and academic performances. Female students, on the other hand, appear to be more influenced by family than do males. The family influences for females include structure, whether they have sibling(s) and/or a complete two-parent family, and/or family financial situation. Gender differences also appear in Canadian experience factors. Male students' migration intentions tend to be associated with friendship with Canadians and kinships in Canada, social network factors, and social activity participation which clearly facilitate adaptation into Canadian society. These factors have much less significance for female students who tend to be driven by feelings of emotional connectedness.

In "Section II: Aspirations and Migration Intentions," the results for our work on aspirations and migration intention illustrate, once again, an instrumental versus social/relational duality for males and females. Postgraduate aspirations and work destination are significantly characteristic of male students but this is not the case for female students. Also, in contrast, parents' influence on migration intention is relatively strong for females. As we incorporate the results in "Section I: Influences of Demographic Characteristics, Premove Traits, and Canadian Experiences on Migration Intentions" and "Section II: Aspirations and Migration Intentions" in our summation, it is clear that male students are disposed to consider career-oriented rational attitudes in immigration decision making, while females students consider emotional/relational and family factors. The instrumental factors for males seem to be issues of human capital, social networks, and occupational success; the more affective factors for female students include family conditions, parents' expectation, and feelings of belonging and support. These gender differences should not imply that males care only about life goals and career development and that females care only about family bonds and other intimate relationships. They do suggest, however, that social and emotional adaptations are critical as are economic adaptations in facilitating intention to stay permanently, although the forces that drive Chinese students to immigrate are different in intensity for females and males.

Lastly, we wish to focus for a moment on the important implication of parental involvement in the immigration decisions of students. In this study, we find that both students' decision to study abroad and migration intentions are heavily influenced by parents' expectations. In addition to these direct influences, parents' human capital has an indirect influence especially on male students' migration intentions, as do parents' financial situation and marital status for both males and females. However, given significant gender differences with respect to family background and intention, we argue that having parents with a relatively low socioeconomic status does not necessarily discourage students from intending to apply for permanent residence, especially if those students are male. The reality is that, for most Chinese undergraduate students, the family financial situation has to be good enough to afford costly tuition and living fees in Canada and it appears that for males, especially, a relatively disadvantaged family background actually drives them to pursue a change through immigration.

Clearly, Canada has implemented policies which encourage foreign students to work and stay in Canada. China, even though it is a traditional sending country, is experiencing a similar growing demand for a skilled work force as it develops economically. Consequently, Chinese students who receive higher education abroad have been one of the foci of current Chinese immigration policy. Although there is no sign of a dramatic change in term of the receiving-sending relationship between Canada and China, Canada feels increased pressure to compete for skilled workers, not only from other traditional developed countries but also from traditional sending countries undergoing rapid economic growth, exemplified by China and India. In this study, the intensity of Chinese students' migration intentions underscore new global economic dynamics: more than half of the respondents are uncertain about whether they will stay permanently or return; 12.5% of them report no interests in applying for immigrant status; and, unexpectedly, the students who have made their mind to settle permanently are a minority. To confront global economic challenges, Canada needs to implement policy to make it easier to attract foreign students and to facilitate their decisions to stay in Canada. Despite the current economic crisis, foreign students, as both consumers and potential skilled workers, are still in high demand and will be in greater demand when the global economy recovers.

Our findings have direct policy guidance for Canada. We showed that employment opportunities and life choices are not the only concerns of student migrants. Their intentions to stay also rested on the accessibility of more social and emotional supports. While it is more likely that female students need these supports to foster their feelings of belonging, male students may require increased support to build social networks, and the supports may be either within or outside their community. In short, successful experiences in social and cultural adaptation will increase the likelihood that they will choose to stay. Therefore, in addition to the labor-market-orientated policy changes in immigration which have become the focus recently, we suggest a special attention to cultural orientation programs through social service/counseling. Such programs should be supported through the cooperation of government and educational institutions to facilitate interpersonal or group interaction among foreign students from similar or different backgrounds and also between foreign students and local Canadians. Not only does this foster crosscultural adaptation, an ethical principle in itself, but it also facilitates decisions regarding permanent immigration.

This study, then, may be considered as a first step in developing policy that incorporates foreign students' sociocultural adaptation to immigration programs by considering individual and collective need. And, further research would profit by extending the study of immigration intentions to all types of foreign students by focusing on consistency and difference across culture in understanding students' intentions to stay or to return.

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References

- Alberts, H. C., & Hazen, H. D. (2005). "There are always two voices...": International students' intentions to stay in the United States or return to their home countries. *International Migration*, 43(3), 131–152.
- Aroian, K. J., Norris, A. E., Fernandez, M. A., & Averasturi, L. M. (2008). Gender differences in psychological distress among Latin American immigrants to the Canary Islands. *Sex Roles: A Journal* of Research, 59(1–2), 107–118.
- Awasthi, S., & Chandra, A. (1994). Migration from India to Australia. Asian and Pacific Migration Journal, 3, 393–409.
- Baker, J. G., & Finn, M. G. (2003). Stay rates of foreign national doctoral students in US economic programs. Retrieved Jan. 05, 2009, from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=398640.
- Balaz, V., Williams, M., & Kollar, D. (2004). Temporary versus permanent youth brain drain: Economic implications. *International Migration*, 42(4), 3–32.
- Beauchesne, E. (2006). Our skill shortage near top. *Times Colonist* Retrieved June 26, 2008, from http:// www.Canada.com/victoriatimescolonist/news.
- Canadian Bureau for International Education. (2005). The National Report on International Students in Canada 2002. Retrieved Feb. 06, 2009, from http://www.cbie.ca/data/media/resources/2002_NationalReport_e.pdf.
- Castles, S., & Miller, M. J. (1993). The age of migration: International population movements in the modern world. New York: Guildford.
- Citizenship and Immigration Canada. (2005). The monitor. Retrieved Feb. 01, 2009, from http://www.cic. gc.ca/english/resources/statistics/monitor/index.asp.
- Citizenship and Immigration Canada. (2006). Studying in Canada: Work permits for students—working off campus. Retrieved April 17, 2009, from http://www.cic.gc.ca/ENGLISH/study/work-offcampus.asp.

- Citizenship and Immigration Canada. (2008). Canadian experience class. Retrieved Feb. 05, 2009, from http://www.cic.gc.ca/english/immigrate/cec/index.asp.
- Citizenship and Immigration Canada. (2009). Glossary of terms. *The Monitor* Retrieved Feb.10, 2009, from http://www.cic.gc.ca/english/resources/statistics/monitor/glossary.asp.
- Coleman, J. S. (1990). Foundations of social theory. Cambridge: Belknap.
- Donato, K. M., Wakabayashi, C., Hakimzadeh, S., & Armenta, A. (2008). Shifts in the employment conditions of Mexican migrant men and women: The effect of U. S. immigration policy. *Work and Occupations*, 35(4), 462–495.
- Feldman, S. S., & Rosenthal, D. A. (1991). Age expectations of behavior autonomy in Hong Kong, Australia and American youth: The influence of family variables and adolescents' values. *International Journal of Psychology*, 26(1), 1–23.
- Finn, M. G. (2003). Stay rates of foreign doctorate recipients from US universities. Oak Ridge: Oak Ridge Institute for Science and Education.
- Gao, M., & Liu, X. (1998). From student to citizen: A survey of students from the People's Republic of China in Australia. *International Migration Review*, 36(1), 27–48.
- Government of Saskatchewan. (2005). Saskatchewan Immigrant Nominee Program (SINP). Retrieved April 19, 2009, from http://www.immigration.gov.sk.ca/sinp?Anc=7e8f4b1d-79b4-4120-8b3a-599d97fc7875&Pa=ebd9edd0-fecd-4503-b6f7-70a7366de4c4.
- Green, D. A., & Riddell, W. C. (2001). *Literacy, numeracy, and labour market outcomes in Canada*. Vancouver: UBC and Canadian Institute for Advanced Research.
- Hansen, P. (2008). Circumcising migration: Gender return migration among Somaliland. Journal of Ethnic and Migration Studies, 34(7), 1109–1125.
- Haug, S. (2008). Migration networks and migration decision-making. *Journal of Ethnic and Migration Studies*, 34(4), 585–605.
- Hawthorne, L. (2005). "Picking winners": The recent transformation of Australia's skilled migration policy. *International Migration Review*, 39(3), 663–696.
- Human Resources and Social Development Canada. (2007). Looking ahead: A 10-year outlook for the Canadian labour market (2006–2015). Retrieved Jan. 10, 200, from http://www.hrsdc.gc.ca/eng/ publications resources/research/categories/labour market e/sp 615 10 06/page00.shtml.
- Khoo, S. E., Hugo, G., & McDonald, P. (2008). Which skilled temporary migrants become permanent residents and why? *International Migration Review*, 42(1), 193–226.
- Lee, S. W., Myers, D., Ha, S. K., & Shin, H. R. (2005). What if immigrants had not migrated? Determinants and consequence of Korean immigration to the United States. *The American Journal of Economics and Sociology*, 64(2), 609–636.
- Li, P. S. (2003). Destination Canada: Immigration debates and issues. Don Mills: Oxford University Press.
- Li, F. L., Findlay, A. M., Jowett, A. J., & Skeldon, R. (1996). Migrating to learn and learning to migrate: A study of the experiences and intentions of international student migrants. *International Journal of Population Geography*, 2, 51–67.
- Liang, Z., & Morooka, H. (2004). Recent trends of emigration from China: 1982–2000. International Migration, 42(3), 145–164.
- Lin, C. Y., & Fu, V. R. (1990). A comparison of child rearing practices among Chinese, immigrant Chinese, and Caucasian–American parents. *Child Development*, 61, 429–433.
- Massey, D. S. (1994). An evaluation of international migration theory: The North American case. *Population and Development Review*, 20(4), 699–751.
- Massey, D. S., & Malone, N. (2002). Pathways to legal immigration. *Population Research and Policy Review*, 21, 473–504.
- Organization for Economic Co-operation and Development. (2002). Trends in International Migration— SOPEMI 2001. Paris: OECD.
- Pang, B. C., & Appleton, N. (2004). Higher education as an immigration path for Chinese students and scholars. *The Qualitative Report*, 9(3), 500–527.
- Peterson, G. W., Wilson, S. M., Bush, K. R., & Zhao, B. (2002). Strengths in the Chinese parentadolescent relationship: Socializing adolescent self-esteem and professional behavior. Paper presented at the International Family Strengths Con
- Quinn, M., & Rubb, S. (2005). The importance of education-occupation matching in migration decision. *Demography*, 42(1), 153–167.
- Radu, D. (2008). Social interactions in economic models of migration: A review and appraisal. *Journal of Ethnic and Migration Studies*, 34(4), 531–548.
- Riess, K.A. (2008). Immigration logiam makes labour shortage worse. Retrieved from http://working. canada.com/regina/resources/story.html?id=aef47068-8bdf-495a-a925-56d46b4b3f1d

- Thurow, L. (1999). Building wealth: The new rules for individuals, companies and nations in a knowledge-based economy. New York: Harper Collins.
- Tremblay, K. (2005). Academic mobility and immigration. Journal of Studies in International Education, 9(3), 196–228.
- Xia, Y. R., Xie, X. L., Zhou, Z., DeFrain, J., Meredith, W. H., & Combs, R. (2004). Chinese adolescents' decision making, parent–adolescent communication and relationships. *Marriage and Family Review*, 36(1), 119–145.
- Ziguras, C., & Law, S. F. (2006). Recruiting international students as skilled migrants: The global 'skills race' as viewed from Australia and Malaysia. *Globalization, Societies and Education*, 4(1), 59–76.

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