

The Credentialing Problems of Foreign Trained Personnel from Asia and Africa Intending to Make their Home in Canada: A Social Psychological Perspective

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Abstract This study examined the experiences of a sample of skilled immigrants to Canada from Asia and Africa who were currently experiencing credentialing problems ($N=180$). Most respondents had advanced postsecondary training and a job requiring a high level of skill prior to emigrating, but many were unable to obtain equivalent work in Canada. In reaction, they took work for which they were overqualified, volunteered, had their qualifications assessed, and upgraded their training. Most respondents were surprised and upset that it was so difficult for them to obtain a suitable job in their profession, and many felt that immigrants were discriminated against by Canadian employers. The policy implications of this “brain waste” are discussed.

Résumé Cette étude examine les expériences d'un échantillon représentatif d'immigrants au Canada qualifiés, originaires de l'Asie et de l'Afrique, qui connaissaient au moment de l'étude des problèmes de credentialing ($N=180$). La plupart des interrogés possédaient une qualification postsecondaire et avaient pratiqué avant d'émigrer un emploi exigeant un haut niveau de compétences, mais beaucoup d'eux n'avaient pas pu obtenir un travail équivalent au Canada. Comme réaction, ils avaient pris un travail pour lequel ils étaient surqualifiés, ou ils travaillaient comme volontaires, ou avaient fait évaluer leurs qualifications ou les avaient améliorées. La plupart des interrogés étaient surpris et vexés qu'il était si difficile pour eux de trouver un emploi approprié dans leur profession, et beaucoup croyaient que les immigrants étaient des victimes de discrimination de la part des employeurs canadiens. Les implications politiques résultant de ce “gaspiillage des cerveaux” sont examinées.

Keywords Credentialing problems · Underemployment · Skilled immigrants · Integration · Human capital · Visible minorities

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Introduction

Immigrants are welcomed by Canadians for two very different reasons, economic and humanitarian. On the one hand, labour shortages and a low birth rate make it essential to recruit highly trained immigrants for economic reasons. This objective is achieved through the points system, which is designed to ensure that economic class immigrants are well educated and come to Canada with skills and experience in their chosen profession. On the other hand, Canada's reputation as a strong supporter of humanitarian relief efforts and human rights dictate that its immigration policy should support the reunification of families and the acceptance of refugees fleeing from persecution in countries controlled by repressive regimes. In the 1990s, Canadian immigration policy shifted toward the former imperative because of the economic realities imposed by a low birth rate and an aging workforce. These exigencies prompted many economists to advocate the sustained recruitment and retention of substantial numbers of highly skilled workers to maintain and enhance Canada's economic growth over the long term (Grant and Sweetman 2004). Consequently, 54% of all immigrants who arrived in Canada between 1996 and 2001 were economic class immigrants, an all time high (Picot 2004).

Given that the Canadian government has made considerable efforts to recruit highly skilled immigrants over the last 15 years, it is hardly surprising that native-born Canadians tend to be less educated than Canadians born in another country. For example, the 2001 census shows that 13.8% of men and 13.3% of women who were born in Canada have a university degree, compared to 23.5% of men and 18.3% of women who were born elsewhere (Mulder and Korenic 2005). By and large, these highly educated immigrants were not recruited from Western Europe as in the past but, rather, from new source countries that had not been targeted before. The result was that, during the 1990s, many more people immigrated to Canada from Asian countries than from European countries (58.2% vs 19.5% for immigrants arriving between 1991 and 2001), a reversal of the immigration pattern of the past. Indeed, during the 1990s, three quarters (73%) of the immigrants who came to Canada were classified by Statistics Canada as members of a visible (read non-white, non-Aboriginal) minority group (Statistics Canada 2003). That is, the policy of recruiting highly skilled immigrants from around the world has made Canada both more competitive and more culturally diverse. Indeed, the most recent census shows that 9% of the Canadian population in 2001 were immigrants who could be described as racialized Canadians of mostly Chinese (28%), South Asian (24%), Black (13%), or Filipino (8%) ethnic origin (Mulder and Korenic 2005).

Since 1967, people have been admitted as economic class immigrants to Canada under a points system, which emphasizes the value of both their educational qualifications and their work experience. Skilled personnel living in Asian and African countries, therefore, receive the implicit message that Canadian employers and professional accreditation bodies will recognize and value their credentials and work experience should they decide to immigrate to Canada. Unfortunately, this

implication is unfounded, as the Canadian government has no mechanisms in place that will ensure such recognition. Indeed, the evidence overwhelmingly suggests that Canadian employers and professional accreditation bodies are not up to the task of evaluating the merit of foreign qualifications and work experience obtained in countries from very distant parts of the world. Specifically, a human capital approach to research investigating this issue has shown that foreign qualifications and work experience are consistently undervalued, resulting in initial wage gaps that, for recent immigrants, particularly immigrants of colour, are much larger than in the past (Basavarajappa and Jones 1999; Grant and Oertel 1998; Grant and Sweetman 2004; Li 2000, 2001, 2003; Pendakur and Pendakur 2000; Picot 2004). Indeed, the initial income gap is so large that it may never be completely closed, as immigrants to Canada in the 1980s seemed to have reached a plateau at which they earn approximately 85% of the income earned by native-born Canadians with similar qualifications and work experience (Picot 2004). Further, a recent, fine-grain analysis of income differentials by field of study (Anisef et al. 2003) illustrates a particularly pernicious aspect of this problem. They show that immigrants tend to be trained in prestigious professions that are associated with the highest incomes within the Canadian labour market (e.g., engineering, physical sciences, and commerce). Yet, racialized Canadians with foreign training in these fields of study were the ones who tended to be most underpaid relative to white, native-born Canadians. Further, other research suggests that the initial wage gap for racialized immigrants is an important pay equity issue because it results from both an undervaluing of the immigrant's professional credentials and from discrimination, with women being especially adversely affected (Basavarajappa and Jones 1999; Boyd 1999; Li 2000; Grant and Oertel 1998; Reitz 2001).

Essentially then, many highly skilled immigrants, particularly immigrants who are members of a visible minority, suffer considerable downward mobility upon their arrival in Canada (Anisef et al. 2003; Basran and Zong 1998; Bauder 2003; Krahn et al. 2000). That is, they are often unemployed or underemployed with disproportionate numbers living below the low-income cutoff relative to native-born Canadians. Here, a recent analysis by Picot (2004) is pertinent, as it shows that the proportion of Canadians born in another country who were living below the low-income cutoff increased from 24.6% in 1980 to 35.8% in 2000, while the proportion of native-born Canadians living below the low-income cutoff declined from 17.2% to 14.3% during the same period. Further, these proportions vary substantially by source country such that increases in the proportion living below the low-income cutoff are confined to immigrants from Asia, Africa, and the poorer European countries outside of Western Europe (see also Grant and Sweetman 2004). Problems associated with living on a low income are compounded amongst this highly educated and experienced sector of the workforce because the majority live in Toronto, Vancouver, or Montreal (Picot 2004). This creates concentrations of highly educated racialized Canadians living together in poverty because their foreign qualifications and work experience are not fully recognized. Even if this is not the result of deliberate discrimination, it surely must appear so to many of these new Canadians who are struggling to achieve full economic integration. More pragmatically, this situation is highly undesirable because it subverts the very rationale for Canada's current immigration policy; namely, the need for highly

skilled immigrants to help sustain a vibrant Canadian economy in the face of current and projected skilled labour shortages. Bauder (2003) argues that this waste of human capital is “brain abuse” because it violates the social contract that brings skilled immigrants to Canada: in exchange for a high standard of living in a multicultural Western democracy, immigrants contribute the benefits of their training and experience to Canadian organizations and, ultimately, to Canada as a whole.

Clearly, a human capital approach has great value in documenting the nature and extent of the barriers to economic integration faced by highly trained immigrants from Asia, Africa, and other regions of the world. It cannot shed light on the situation faced by immigrants as they live with continuing periods of unemployment and underemployment while adjusting to living in a culture that is very different from their culture of origin, however. This is because social scientists in this research tradition typically use regression analysis of census microdata files in which discrimination is inferred, given that white Canadian-born males still earn significantly more than other subsamples of respondents defined by their nativity, visible minority status, country of origin, and gender after controlling for a variety of human capital and other variables. Of course, living with un/underemployment is stressful for most individuals, but it is particularly so for skilled immigrants because it exacerbates acculturative stress and prevents immigrants from achieving full economic adaptation defined as “full economic participation in the economic life of Canada” (Ayca and Berry 1996, p. 242; see also Berry 1997; Ward et al. 2001).

Noting this, Basran and Zong (1998) gave a questionnaire to 404 foreign trained professionals living in Vancouver who had immigrated to Canada from India, Taiwan, Hong Kong, and China. The results were both revealing and disturbing, as they showed that these professionals had experienced considerable downward mobility after immigrating to Canada and were currently living on a relatively low income (70% under \$30,000). For example, 88% had worked in their profession in their country of origin but only 18.8% had done so in Canada, and most had experienced difficulty in having their foreign credentials and work experience recognized. In addition, considerable numbers said that they were discriminated against by potential employers because of their skin color (65%), because of their national or ethnic origin (69%), or because they spoke English as a second language (79%). Interestingly, approximately three quarters of the respondents said that the government should do more to help immigrants meet Canadian accreditation standards and were willing to partially cover the costs of such government services (just over 50% were willing to negotiate a bank loan for this purpose). As well, almost 80% of the respondents said they would support a program in which immigrants work in a rural area for some time as repayment for retraining designed to help them meet professional standards. Similarly, Krahn et al. (2000) examined the Canadian employment experiences of 525 refugees mostly from former Yugoslavia who had resettled in Alberta between 1992 and 1997. Although many of these refugees came to Canada with a high education level and corresponding work experience, they also experienced considerable downward mobility, which they attributed to credentialing problems, a lack of Canadian work experience, and inadequate language training.

These findings were echoed in the comments elicited in qualitative interviews with representatives of 39 government, religious, and other immigrant serving

agencies in Vancouver (Bauder 2003). These service providers noted that skilled immigrants often complained that the points that they received for their foreign credentials and work experience had allowed them to immigrate, but did not allow them to practice their profession in Canada. Employment counsellors and others in this study felt that foreign credentials are often not recognized or are given much lower educational value in comparison to Canadian credentials. They indicated that their clients often expressed disappointment at the lack of available employment opportunities and felt that their career was stagnating in Canada.

The study described in this paper is part of a program of research that examines the credentialing problems of skilled immigrants from a social psychological perspective (see Grant 2005b). This research program was developed in response to the findings from two earlier studies that investigated the content and function of the Canadian identity of immigrants predominantly from Asia and Africa (Grant 2002). In the first study, in-depth qualitative interviews were conducted with 25 immigrants who had become leaders within their cultural communities (Grant et al. 2001). The results showed that one barrier to developing a strong Canadian identity and actively participating in Canadian society (psychological and behavioural acculturation) was racism in general and the lack of acceptance and the undervaluing of foreign credentials and work experience in particular. As well, difficulties understanding and penetrating the Canadian labour market and mastering the English language were also barriers to acculturation. In the second study, 403 immigrants mostly from Asia and Africa completed a questionnaire that examined the same topics using a mix of established scales and new scales developed from the themes identified in the first study (Grant 2007, study 1). The results showed that support for multiculturalism and the development of a strong Canadian identity among these respondents was negatively associated with their perception of the extent to which discriminatory barriers prevented their integration into Canadian society. As well, the less the respondents identified with Canada, the more they favoured their heritage culture over Canadian culture (cultural group bias). These results illustrate the negative psychological implications of underutilizing immigrants' training, skills, and talents. The more they feel marginalized in the Canadian labour market, the less they wish to become part of the mainstream Canadian society that has rejected them. That is, these results suggest that the undervaluing of foreign credentials and work experience is an injustice that is both socially undesirable because it undermines multiculturalism and economically undesirable because it squanders valuable human capital.

The research described here was built upon Grant's earlier work, as well as that of Basran and Zong (1998) and Krahn et al. (2000), but specifically sampled skilled workers with foreign, mostly professional, training and work experience who intend to make their home in Canada and who were currently experiencing credentialing problems. Most of the sample was made up of immigrants, and the goal was to collect extensive descriptive information on their circumstances expanding on the findings from previous studies taking this approach (Basran and Zong 1998; Krahn et al. 2000). Our particular focus, however, was on the respondents' psychological reactions to the undervaluing of their foreign credentials and work experience both as individuals and as members of a minority group. Specifically, the study was designed as a general exploration of how immigrants face this stressful situation (Berry 1997; Liebkind and Jasinskaja-Lahti 2000; Ward et al. 2001) and the extent to which they

attributed their credentialing difficulties to racism rather than personal inadequacies (Swim and Stangor 1998; Schmitt and Branscombe 2002), with particular reference to relative deprivation theory (Dion 1986, 2001; Grant and Brown 1995; Runciman 1966; Walker and Smith 2002). This theory explains the psychological reactions of people whose expectations have been unfairly violated because of their minority group membership. Clearly, this applies to skilled immigrants whose expectations are dashed when they find that they cannot practice their chosen profession in Canada because the qualifications they obtained in their country of origin are not recognized by potential employers. However, the formal test of a theoretical model derived from relative deprivation theory and social identity theory is the subject of another paper (see Grant 2005a). In keeping with the theme of the special issue, the current paper will present a general social psychological analysis of the reactions of skilled immigrants facing credentialing problems.

Method

Respondents

The participants in this study consisted of 180 skilled, mostly professionally trained, workers with foreign credentials and work experience who were experiencing credentialing problems when they answered the questionnaire. All respondents were living in a moderate-size city in the prairie region of Canada and intended to make Canada their permanent home. Almost all of these respondents were from Asia or Africa, and just over half (56.6%) were women. Most of the respondents (81.9%) were married, and 82.9% had at least one child (range one to five children). Half (50.3%) of the respondents were between the ages of 30 and 39 years, with most of the remainder in their 20s (21.9%) or 40s (22.5%). They emigrated from the Far East (42.0%), South and South East Asia (10.7%), the Middle East (17.3%), and Africa (26.7%), with the most common countries of origin being China (39.7%), Iran (15.9%), and Nigeria (15.2%). Of the 112 respondents who answered the question on religion, most said they were Christian (46.4%), Muslim (25.0%), or had no religion (18.8%).

Seventy four percent of the respondents had lived in Canada for 4 years or less (median=34 months), and almost one quarter (24.7%) had become Canadian citizens. However, most respondents were still landed immigrants (45.3%), university students (14.7%), or on a visitor's visa (12.4%). Those in the latter two categories were included in the study because they indicated their firm intention to become a landed immigrant to the research assistant. Indeed, 24 of the 45 respondents (53.3%) who had arrived in Canada on a visitor's visa were already immigrants (16) or Canadian citizens (9).¹ Although English was not the first language of any of the respondents, 60.8% had learned English as a child and 42.7%

¹ Of the 29 respondents in the sample who came to Canada as students, 3 had become landed immigrants and 3 Canadian citizens. The remaining 23 respondents were still students but intended to become Canadians and make Canada their home.

were educated in English. The vast majority of respondents had a personal income of less than \$30,000 a year (82.8%). Indeed, many respondents' incomes were less than \$10,000 (33.1%) or between \$10,000 and \$20,000 a year (33.8%). This provides objective evidence that these individuals were experiencing serious financial problems, as an income of \$20,000 is below the Canadian low-income cutoff for a married couple with no children. Additionally, the income levels of the respondents in this study stand in stark contrast to recent estimates that indicate that 11% of men and 12% of women born in Canada live below the low-income cutoff (Mulder and Korenic 2005).

Procedure

Participants were recruited over a 6-month period from September 2004 through February 2005. Three research assistants, who had recently immigrated to Canada from Africa and Asia, recruited participants through their extensive community contacts.² These research assistants were given written instructions to recruit immigrants to Canada who **"MUST be experiencing difficulties obtaining a job BECAUSE THEIR FOREIGN QUALIFICATIONS AND/OR WORK EXPERIENCE ARE NOT RECOGNIZED BY CANADIAN EMPLOYERS OR CANADIAN PROFESSIONAL ORGANIZATIONS"** (the use of bolding and capital letters appear as in these instructions). Most of the participants ($N=172$) were obtained using these informal networks. Most often, envelopes containing the questionnaire and a consent form were given to the respondents during a gathering or a meeting of a local organization. After reading through the questionnaire and signing the consent form, the respondents could take the questionnaire home to complete (a popular option), or they could complete it with the research assistant present at a mutually convenient time. In either case, the research assistant was available to help the respondent with difficult questions in-person and by telephone. The questionnaire took 45 minutes to complete (the median).

Measures

The self-administered questionnaire consisted of quantitative and a few qualitative questions designed to probe the nature and extent of the respondents' credentialing problems and a number of multi-item psychological scales.³ The former asked respondents about their training and work experience before and after arriving in Canada, including their attempts to obtain recognition for their foreign credentials in Canada and their experience with and reaction to Canadian employers. Most of the quantitative questions were answered using Likert-type scales.

Several multi-item scales developed in previous research by Grant (2002, 2007) were used in this study. The reliability and the descriptive statistics for these multi-

² Eight participants were recruited by Nadin, who worked with a contact person at local community and government agencies that provide services to immigrants.

³ Write to Grant for a copy of the questionnaire.

item scales are given in Table 1 (see Grant 2007 for the scales developed in this program of research). Two scales measured the degree to which the respondents felt that immigrants face barriers to their integration into Canadian society (see Appendix). The Discriminatory Barriers to Integration Scale measured the perception that immigrants are discriminated against in Canadian society. This scale consists of ten items answered using a five-point Likert scale and consists of two correlated subscales ($r=0.42$) identified by factor analysis: perceptions of discrimination against immigrants in the Canadian labour market (DAILM, a four-item subscale) and perceptions of discrimination against immigrants in general (DAIG, a six-item subscale). The cultural incompatibilities scale (CIS), a six-item Likert scale measuring common ways in which mainstream Canadian culture is perceived as incompatible with a person's heritage culture was also included in the questionnaire. Both the DAIG and ICS were used in two previous studies that showed that they have validity, as they were found to be correlated positively with each other and negatively with strength of Canadian identification and attitudes supporting multiculturalism (for further supporting evidence, see Grant 2007).

Because the respondents were all experiencing credentialing problems, their negative emotional reactions to this stressful situation were assessed. Specifically, they indicated the degree to which they felt angry, stressed, frustrated, resentful, sad, disappointed, bad, discouraged, bitter, and hurt when they had "problems gaining recognition from a Canadian employer for your credentials and work experience from your country of origin." A previous, qualitative study involving interviews with 21 immigrants from Asia and Africa experiencing credentialing problems had identified these negative emotions as common affective reactions to credentialing

Table 1 Reliabilities and other descriptive statistics for the multi-item scales used in this study and by Grant (2007), study 1

Scale	This study					Grant (2007) study 1		
	Items	Range	Means	SD	Alpha	Means	SD	Alpha
Strength of Canadian identification	6	1 to 7	4.06 ($N=165$)	1.36	0.84	5.04 ($N=392$)	1.28	0.88
Strength of cultural group identification	6	1 to 7	5.68 ($N=169$)	1.18	0.83	5.51 ($N=396$)	1.34	0.90
Attitudes toward multiculturalism	10	1 to 5	4.00 ($N=170$)	0.58	0.87	4.02 ($N=399$)	0.57	0.89
Cultural incompatibility	6	1 to 5	3.21 ($N=174$)	0.65	0.71	3.12 ($N=397$)	0.73	0.78
Perceived discrimination in Canadian society	6	1 to 5	3.45 ($N=171$)	0.80	0.84	3.53 ($N=358$)	0.65	0.83
Perceived discrimination in Canadian workforce	4	1 to 5	4.06 ($N=173$)	0.69	0.75	N/A	N/A	N/A
Emotional reactions to credentialing problems	10	1 to 4	2.60 ($N=152$)	0.72	0.94	N/A	N/A	N/A

Alpha refers to the reliability coefficient, Cronbach's alpha. Respondents with a high score on these scales strongly identified with Canada and their heritage culture, had a positive attitude toward multiculturalism, felt that the Canadian and their heritage cultures are incompatible, felt that immigrants face discriminatory barriers generally and when dealing with Canadian employers, and had a strong negative emotional reaction to their credentialing problems

problems (Grant 2005b).⁴ Respondents indicated the intensity of their negative emotions on four-point scales that ranged from “not at all” to “very” (e.g., not at all angry, a little angry, angry, very angry). A factor analysis showed that all these emotional responses loaded on the same factor, and so, a “Negative Emotional Reactions” scale was created by averaging the respondents’ scores across the ten items.

Three other scales measured more positive psychological reactions to Canada. The Attitudes Toward Multiculturalism Scale (ATM) is a ten-item Likert scale developed by Grant (2002; 2007), that describes various benefits of multiculturalism. The respondents’ strength of identification with Canada and their cultural group were measured using six items adapted from a scale developed by Brown and his colleagues (Brown et al. 1986), that has been used extensively by intergroup relations researchers and that has good reliability and validity (Jackson and Smith 1999). Respondents used the scale twice: once to rate their strength of identification with Canadians and a second time to rate their strength of identification with members of their cultural group using a seven-point response format.

Results

The Comparability of the Sample with a More General Sample of Immigrants on Key Social Psychological Variables

Table 1 gives the grand means and standard deviations for the multi-item scales used in this study and compares these descriptive statistics with those of a previous study that examined the national and cultural identity of a large sample ($N=403$) of recent immigrants to Canada from Asia and Africa and which did not use current credentialing problems as a selection criterion (Grant 2007, study 1). It shows that the skilled workers with credentialing problems in this study are quite similar to the more general sample of immigrants. Specifically, respondents from both studies indicated they have a strong cultural identity and hold very favourable attitudes toward multiculturalism. Additionally, they felt that their cultural background was, to some extent, incompatible with Canadian culture. The first row of Table 1 indicates that the respondents in the present study identified only moderately with Canada ($M=4.06$), but very strongly with their heritage culture ($M=5.67$); $t(163)=13.50$, $p<0.0001$. This is the only major difference between the samples in these two studies. Foreign trained personnel who are experiencing credentialing problems (this study) have a weaker Canadian identity ($M=4.06$) than the general sample of immigrants from the previous study ($M=5.04$).⁵

The relationships among these variables are also similar to those obtained previously. Specifically, the strength of the respondents’ Canadian identity was

⁴ A reviewer of an early draft of this paper suggested that these scales may be biased because they do not contain positive emotions. However, qualitative interviews from a previous study (Grant 2005b, Study 1) had shown that credentialing problems are experienced very negatively. Therefore, it was felt that asking about positive emotional reactions to this experience would be inappropriate and very insensitive.

⁵ In the earlier study (Grant 2007, Study 1), the general sample of immigrants also identified significantly more strongly with their cultural group ($M=5.51$) than with Canada ($M=5.04$); $t(389)=6.02$, $p<0.0001$.

positively related to strength of cultural identity ($r=0.30$, $p<0.001$) and attitudes favouring multiculturalism ($r=0.14$, $p<0.05$) but negatively related to the perception that immigrants are discriminated against in the Canadian labour market ($r=-0.16$, $p<0.05$) and generally in Canadian society ($r=-0.14$, $p<0.05$). These findings replicate those of the earlier study (Grant 2007) and demonstrate that national and cultural identities are compatible, while suggesting that the emergence of a strong national identity is weakened when immigrants face discrimination. Further, the more respondents felt that immigrants are discriminated against in the Canadian labour market and in Canadian society, the more intensely they felt negative emotions when they personally experienced problems obtaining recognition for their foreign credentials and work experience ($r=0.45$, $p<0.001$; $r=0.46$, $p<0.001$, respectively). These findings provide further validating evidence for the perceived discrimination scale (DAIG), the cultural incompatibility scale (CIS), the attitudes toward multiculturalism scale (ATM), and the negative emotions scale.

A subsidiary set of analyses was done comparing the majority of the respondents who were landed immigrants or Canadian citizens ($n=119$) with those who were students or on visitor's visas ($n=45$) so as to examine the latter's claim that they wished to live in Canada permanently. The results showed that there were very few differences between these two groups. In particular, they did not differ significantly in terms of the strength of their Canadian identity; $M_{\text{imm}}=4.11$, $M_{\text{not}}=3.81$; $t(157)=1.17$, *ns* showing that those who were ostensibly students or visitors were equally committed psychologically to Canada.⁶

Foreign Training, Credentials, and Work Experience

Overall, the respondents were highly educated with training and work experience in a variety of fields. As can be seen in Fig. 1, nearly all of the respondents (97.5%) had obtained a postsecondary education in their country of origin, and they averaged 9 years of work experience in that country prior to emigrating ($M=9.14$, range 1–30 years).

The National Occupation Classification (NOC) was used to code respondents' occupations by skill type and skill level (Human Resources Development Canada 2001). Respondents' occupations in their countries of origin categorized by NOC skill type are given in Table 2. The table shows that respondents were working in a wide range of fields, with the most common being the natural and applied sciences, health, education and the social sciences, and the business and finance sectors, prior to immigrating to Canada.

⁶ Specifically these two groups of respondents did not differ in terms of the strength of their cultural identity, their positive attitudes toward multiculturalism, the degree to which they perceived cultural incompatibilities between their culture and Canadian culture, and the degree to which they felt that Canadian employers discriminated against immigrants. Indeed, the only significant differences found between these two groups were that, on average, students/visitors had lived in Canada for a shorter length of time [25.4 vs 46.7 months; $t(159)=3.01$, $p<0.01$], had held fewer Canadian jobs [1.03 vs 1.53, $t(136)=2.30$, $p<0.05$], had a lower personal income [1.64 vs 2.70; $t(159)=3.39$, $p<0.001$, where "1" means \$10,000 to \$19,999 and "2" means \$20,000 to \$29,999 per year], and were younger [2.66 vs 3.26, $t(158)=4.34$, $p<0.001$, where "2" means the 20s and "3" means the 30s].

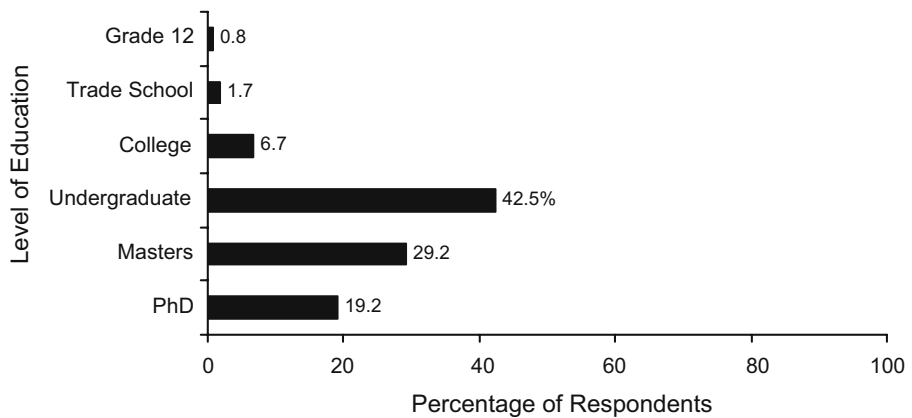


Fig. 1 The educational attainment of respondents prior to immigrating to Canada ($N=120$)

The NOC skill *level* refers to the amount of education or training that is required for a particular occupation and ranges from 1, which signifies an occupation that requires a university degree, to 6, which corresponds to an occupation that requires no formal educational requirements. Prior to arriving in Canada, most respondents (94.3%) were employed at skill levels 1 or 2 ($N=106$). Only a small percentage of respondents (5.7%) were employed in jobs that required little specific qualifications and/or training prior to arriving in Canada (Fig. 2). Of course, this is a Canadian classification system, and may not map perfectly onto foreign qualifications. Nevertheless, the findings clearly indicate that this sample of immigrants have a high level of skill and were employed in jobs requiring this skill level prior to arriving in Canada.⁷

Work Experiences in Canada

As can be seen in Table 3, almost half of the respondents, who were all skilled and experienced workers, described obtaining recognition from Canadian employers for their foreign credentials and work experience as “impossible” or “very difficult,” with a similar percentage saying that it was “impossible” or “very difficult” to find a job in Canada that fully utilizes their training and experience. This was in spite of the fact that the majority of respondents were landed immigrants or Canadian citizens and that they had not experienced much difficulty with obtaining certificates validating their credentials, or reference letters from former employers from their country of origin. Although most respondents were highly skilled both in terms of their training and their work experience in their country of origin, they had worked only 9 months (the median) at a job that used this skill and experience in Canada,

⁷ Mulder and Korenic (2005) show that male immigrants are more likely to be trained in engineering and applied sciences, while female immigrants are more likely to be trained in the health professions and in management and business administration. There was very little difference between the type of professional training received by men and women in this sample, however. The exception being that men were more likely to be trained in the natural and applied sciences than women; 42.6 vs 26.9%, $\chi^2(1, N=114)=3.06, p<.08$.

Table 2 Occupations in country of origin and Canada categorized by skill type using the NOC

NOC skill type	Country of origin <i>N</i> =116 (%)	Canada <i>N</i> =77 (%)
Natural and applied sciences	33.6	10.5
Health	27.6	10.5
Social sciences, education, and government service	19.8	38.2 ^a
Business, finance, and administration	9.5	3.9
Sales and service	3.4	22.4
Art, culture, recreation, and sport	2.6	3.9
Trades, transport, and equipment	2.6	2.6
Industrial and manufacturing occupations	0.0	6.5
Managerial	0.9	1.3

Skill type refers to the kind of work performed and the general field of education or training (Human Resources Development Canada 2001)

^a More than half of the respondents in this occupational category were employed as either a teaching or a research assistant (58.6% of the whole sample and 53.8% of the landed immigrants and Canadian citizens in the sample)

and success at finding such a job varied widely. Indeed, 30.1% of respondents indicated that they had never had a job that used their credentials and work experience (*N*=133). Respondents had worked an average of 4 months (median) in Canada at a job that does *not* require them to use their skills and experience. This distribution was skewed, however, as 30.5% of respondents who answered this question said 0 months and 21.4% said more than 18 months (*N*=131). Further, 21.2% of respondents indicated that they had to take unskilled work once, and 43.1% said they had to take unskilled work twice or more because their family needed money (*N*=137).

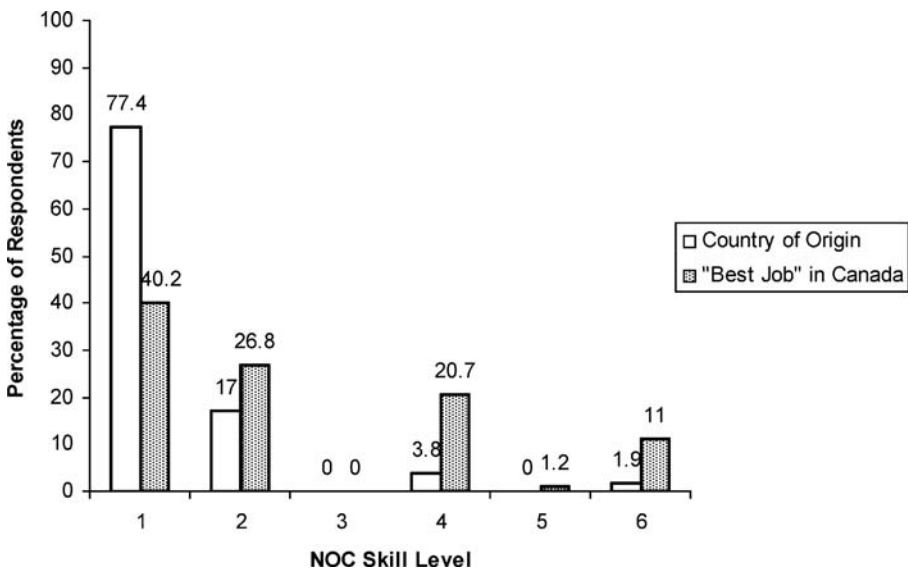


Fig. 2 A comparison of occupation in country of origin (*N*=106) with “best job” in Canada (*N*=81) as a function of NOC skill level

Table 3 The level of difficulty associated with obtaining recognition for foreign training, credentials, work experience, and copies of credentials and reference letters

	Impossible or very difficult (%)	Difficult (%)	Neither (%)	Easy (%)	Very easy or no problems (%)
Difficulties finding suitable employment in Canada					
Recognition of foreign training and credentials (<i>N</i> =164)	44.5	29.3	14.0	6.7	5.5
Recognition of foreign work experience (<i>N</i> =168)	44.0	34.5	10.7	3.0	7.7
Obtaining suitable Canadian employment (<i>N</i> =169)	50.3	30.2	11.2	3.6	4.7
Obtaining reference letters from abroad (<i>N</i> =172)	15.7	14.5	17.4	25.0	27.4
Obtaining copies of foreign credentials (<i>N</i> =169)	16.0	10.7	17.2	33.1	23.1
Difficulties obtaining Canadian training					
Doing well academically (<i>N</i> =104)	3.8	20.2	45.2	20.2	10.6
Enrolling in an educational institution (<i>N</i> =102)	9.8	12.7	38.2	28.4	10.8
Meeting educational expenses (<i>N</i> =105)	15.2	32.4	37.1	12.4	2.9

A good way to obtain Canadian work experience is to volunteer, and almost one-third (32.2%) of the sample indicated that they had done just that. Of those who volunteered, two-thirds (67.2%) had volunteered for 6 months or less, with the remainder volunteering for a more extended period (range 7 to 84 months). Just over half (55.2%) of the respondents who volunteered did so in areas that were related to their occupations in their country of origin.

In terms of their paid work experience, respondents described the “best job” that they had held since arriving in Canada. This job was described as permanent by 36.0% and as casual by 37.7% of these respondents, with 29.8% stating that the job was part-time (*N*=114). Just over half of the respondents (51.3%) felt that they were overqualified for this job, with almost all of the remainder indicating that they were qualified (45.2%). Further, only half of the respondents (49.2%) felt that their training and experience was relevant or highly relevant to this job (*N*=115).

Respondents’ “best job” was also coded using the NOC classification system. Table 2 displays the percentage of respondents who were working in each type of occupational category both prior to and after arriving in Canada. While many respondents were working in either the natural or applied sciences or health occupations in their country of origin, this was not the case for their “best jobs” in Canada. Specifically, many “best jobs” were classified as social services-, education-, or government-related occupations, and over half of these were described as teaching-assistant or research-assistant positions (58.6% of all respondents and 53.8% of respondents who were landed immigrants or Canadian citizens). Also of note is that almost a quarter of the respondents (22.1%) were working in a sales- and service-related occupation in Canada, although very few had done so in their country of origin (3.4%). In terms of NOC skill level, the results show that less than half of respondents’ “best job” in Canada could be classified at skill level of 1 or 2 (*N*=81).

Indeed, one third of the respondents' "best jobs" in Canada are classified at skill levels requiring less than a postsecondary education (See Fig. 2).

To summarize, the results in this section show that many respondents had experienced downward mobility since coming to Canada and were finding it difficult to obtain a suitable Canadian job in their chosen profession despite holding jobs classified at the highest skill levels in their country of origin.

Assessment and Educational Experiences in Canada

To combat underemployment, over a quarter of the respondents (27.8%) had had their qualifications assessed by an international qualifications assessment agency and 38.9% had taken or planned to take qualifying exams so that their credentials would be recognized by Canadian employers. Respondents were asked to explain how the assessment of their credentials helped them find a job. Only 11.6% of the 43 respondents explained that this assessment was helpful, while 37.2% replied that the assessment was not helpful; the remainder of respondents were still in the process of having their credentials assessed (34.9%) or were unsure of how this assessment helped them find a job (11.7%).

One way to penetrate the Canadian labour market is by enrolling in a Canadian educational institution. Three quarters (74.4%) of respondents indicated that they would have to take a Canadian educational or training program in the future ($N=156$). Of those who had already taken a Canadian training program ($N=98$), over half (51.0%) described taking graduate studies, 23.5% described a specific certificate or training course, and a small proportion (8.2%) described language training.

Approximately three quarters of the respondents (72.8%) were using their Canadian training to obtain Canadian qualifications in the same or similar career as the one in their country of origin ($N=92$). Approximately half (51.0%) of the 104 respondents indicated that this training upgraded their qualifications by giving them a Canadian or specialized university degree (55.8%), specific requisite skills (16.9%), or increased recognition of their credentials by Canadian employers (20.9%).⁸ Of course, upgrading your professional qualifications is usually perceived positively but, in this case, many respondents (33.7%) stated that they felt forced to take this upgrade presumably because of a lack of recognition of their foreign credentials by Canadian employers ($N=104$). Many of the 89 respondents who had taken or who were currently taking such training felt that this Canadian training would help them find a job (41.6%), while a similar number (39.3%) felt that it was too soon to tell. Finally, half of the respondents (50.4%) were willing to work in a remote rural area of the prairies for 3 years in exchange for training that resulted in gaining credentials recognized by Canadian employers ($N=113$).

Clearly, there are significant financial costs associated with retraining. Table 3 shows that more than three quarters of the respondents did not feel that enrollment or doing well academically in a Canadian institution would be difficult. Rather, the main difficulty, which was identified by almost half of the respondents (47.6%), was meeting the expenses associated with taking an academic program of studies, although

⁸ One quarter of the respondents (26.9%) indicated that their Canadian training/education had not upgraded their qualifications.

those considering this option were prepared to pay, on average, about half of these expenses (52.5%).

Seventy one respondents described how they would like to see things change so that it is easier for immigrants to enroll in Canadian training programs. A third (32.4%) suggested increased financial support, while a smaller number suggested recognition of foreign training (19.7%) and more general support for immigrants (16.9%). Finally, 53 respondents explained how they would like to see things change so that it is easier for immigrants to do well in Canadian educational or training programs. The most common responses were more language training (30.2%), more opportunities for immigrants to work/retrain (15.1%), and more financial assistance (11.3%).

In sum, because respondents felt that it was very difficult for them to achieve recognition of their credentials by Canadian employers, many were taking, or plan to take, some Canadian training or educational courses to upgrade their qualifications and have them recognized by Canadian employers. However, respondents often experienced financial and other difficulties obtaining access to this retraining.

Psychological Reactions to Underemployment and Perceived Discrimination

Given that skilled workers in Asian and African countries are often told that Canadian employers are recruiting people with their training and experience, it is hardly unexpected to find that almost three quarters of the respondents (73.9%) were either “a little surprised,” “surprised,” or “very surprised” to find that it is so hard to find a suitable job in Canada. Furthermore, more than half of respondents (54.3%) indicated that their experiences with Canadian employers were either “slightly more negative,” “more negative,” or “much more negative” than they expected. Indeed, one-third (33.5%) of respondents felt that, in general, they personally had been treated “unfairly” or “very unfairly” by Canadian employers.

Table 4 shows that approximately one half of the respondents frequently felt that their foreign qualifications and work experience were not valued by Canadian employers and that they had a better chance of finding a good job “back home.” Additionally, about a third of the respondents frequently feared that they would have to settle for an unskilled job if they wanted to stay in Canada and doubted their ability to find a more suitable job. Table 5 shows the gamut of emotions experienced

Table 4 Beliefs associated with difficulties obtaining recognition for foreign credentials and work experience by Canadian employers

	All the time or often (%)	Sometimes (%)	Rarely or never (%)
Foreign qualifications not valued (<i>N</i> =164)	45.1	28.0	26.8
Foreign work experience not valued (<i>N</i> =160)	49.4	28.1	22.5
A better chance of finding a job “back home” (<i>N</i> =169)	48.5	25.4	26.0
Fear having to settle for an unskilled job (<i>N</i> =170)	37.0	31.8	31.2
Doubt ability to find a Canadian job (<i>N</i> =164)	32.3	31.1	36.6
Feel a loss of self-respect (<i>N</i> =171)	21.1	28.7	50.3
Wasting my time in Canada (<i>N</i> =170)	17.7	29.4	52.9

Table 5 Emotions associated with difficulties obtaining recognition for foreign credentials and work experience by Canadian employers

	I felt the emotion (%)	I did not feel the emotion (%)
Disappointed (<i>N</i> =157)	67.6	32.5
Sad (<i>N</i> =156)	63.5	36.5
Bad (<i>N</i> =153)	62.1	37.9
Stressed (<i>N</i> =154)	59.1	40.9
Hurt (<i>N</i> =155)	52.9	47.1
Frustrated (<i>N</i> =154)	50.6	49.4
Discouraged (<i>N</i> =152)	49.4	50.7
Angry (<i>N</i> =157)	47.7	52.2
Bitter (<i>N</i> =151)	46.4	53.6
Resentful (<i>N</i> =146)	41.8	58.2

Respondents used a four-point scale to indicate the intensity of the emotions that they felt when experiencing credentialing problems. An example of the four-point scale is “Not at all sad–a little sad–sad–very sad.” In this table, the percentage of respondents who said that they felt the emotion relatively intensely (e.g., the percentage who felt “sad” or “very sad”) when they experienced credentialing problems is indicated in the left column

by skilled immigrants with credentialing problems. These emotions are highly interrelated with a factor analysis, showing that they all have factor loadings higher than 0.70 on one factor. This means that an immigrant facing credentialing problems is likely to experience many of these emotions at the same time. Specifically, feelings of disappointment, sadness, hurt, and stress are mixed with feelings of frustration, bitterness, resentment, and anger, with Table 5 indicating that these emotions are felt quite intensely by a sizeable proportion of the sample.

Many respondents in this sample felt also that immigrants in general were disadvantaged in Canadian society. For example, almost three quarters (74.1%) of the respondents indicated that, compared to other Canadians, immigrants from their country had a “slightly lower,” “lower,” or a “much lower” social status. Further, one-half (50.3%) of the respondents felt that, in general, Canadian employers treat immigrants either “unfairly” or “very unfairly,” with only a quarter (26.1%) indicating that Canadian employers treat immigrants “fairly” or “very fairly.”

The respondents were asked questions regarding “the barriers that ‘immigrants-in-general’ face as they try to learn about and participate in the Canadian way-of-life.” Two interrelated scales ($r=0.47$, $p<0.001$) were developed from these questions (see Appendix). The first measures how much the respondents agree or disagree that immigrants from their cultural group are discriminated against as they try to enter the Canadian workforce because they do not have a Canadian education, credentials, or work experience. In general, the respondents agreed that this discriminatory barrier is prevalent ($M=4.06$, where a score of 4 is labeled “agree”), with 88.4% of all respondents scoring above the midpoint of the scale and, hence, agreeing, on average, that these discriminatory barriers are a problem. The second scale measures how much respondents agree or disagree that immigrants face discrimination in Canadian society because of their race, culture, accent, poor English language skills, inferior education, and low income level. The respondents also tended to agree that this, more general, discriminatory barrier also exists ($M=3.45$), although significantly less so than discriminatory employment barriers; $t(170)=10.33$, $p<0.0001$.

Overall then, the respondents were surprised by their inability to find suitable Canadian employment, and this stressful situation triggered a myriad of strong emotions, including disappointment, sadness, and anger. Indeed, many felt that their foreign qualifications and work experience were not valued by Canadian employers, and that this was a form of discrimination.

Discussion

While building upon previous Canadian work (Basran and Zong 1998; Krahn et al. 2000), this study was unique because we deliberately sampled foreign trained personnel from Asia and Africa with current credentialing problems. Nevertheless, the results are quite similar to those found previously. Specifically, our findings document the high level of underemployment in this sample with many respondents taking casual and part-time work for which they feel overqualified. These figures are quite similar to those reported by Krahn and colleagues (Krahn et al. 2000) even though their interview study used a very different sampling strategy and a very different target population; namely, a representative sample of refugees to Alberta from the former Yugoslavia. It is instructive to note that those researchers showed that it was professionally trained refugees who had experienced the most downward mobility as they had the most trouble finding suitable work. This of course is one of our major findings even though most respondents were not having a problem obtaining certificates that authenticate their credentials, a common occurrence and cause of great stress to many refugees. To be specific, three quarters of our sample (77.4%) were in professions with the highest NOC skill level classification before they immigrated to Canada, but only 40.2% were able to obtain jobs requiring that skill level in Canada (see Fig. 2). Our findings also parallel those obtained in a study of professionally trained emigrants from India, Taiwan, Hong Kong, and China living in Vancouver who were older, had lived in Canada longer, and were more likely to be Canadian citizens than were the respondents in our study (Basran and Zong 1998). Specifically, the respondents from this earlier study had very similar difficulties obtaining recognition of their credentials and work experience from Canadian employers (79% vs 78.3% in our study), with 70% stating that their income was less than \$30,000 (vs 83% of respondents in our study). Unlike research using a human capital approach (Anisef et al. 2003; Basavarajappa and Jones 1999; Grant and Oertel 1998; Grant and Sweetman 2004; Li 2000, 2001, 2003; Pendakur and Pendakur 2000; Picot 2004; Reitz 2001), the results from these three questionnaire studies give voice to the concerns of highly skilled immigrants and refugees facing credentialing problems. Nevertheless, in spite of using very different methodologies, the findings from these two research traditions converge to show that highly trained immigrants to Canada often suffer considerable downward mobility and are forced to take jobs that underutilize their skills, a result that represents a considerable waste of valuable human capital.

Clearly, education provides a means to achieve meaningful work and an associated high income. It is not surprising, therefore, that the respondents in our study often paid for an international qualifications assessment and/or enrolled in a postsecondary training program to upgrade their credentials or to obtain Canadian credentials in their profession. Generally, such activities are viewed very positively

in our society, but the respondents painted a darker picture. Very few, for example, felt that an international assessment helped them find suitable employment. Further, many respondents felt forced to take upgrading because their foreign training was not valued by Canadian employers. That is, the training was taken, not to upgrade their skills and provide new types of work experience but rather to convince Canadian employers of the value of their existing skills and work experience. It seemed that many respondents felt strongly that obtaining recognition of their foreign credentials by attending a Canadian educational institution was their only chance to obtain a job similar to the one they had held prior to emigrating, and, in this regard, they felt that immigrants should be given more financial help and more retraining opportunities than are currently available. Indeed, over half of the respondents were willing to work in a remote rural area for 3 years in exchange for the opportunity to regain their professional standing in this way and, on average, were willing to pay 50% of the associated expenses. Respondents also expressed a strong desire to obtain Canadian work experience, which they indicated was often a requirement for employment in Canada and which they found very difficult to obtain. Indeed, many respondents did voluntary work to gain such experience.

In sum, the results suggest that the respondents were using their considerable ingenuity to fight strong social forces toward downward mobility within the Canadian labour market. This adds credence to Bauder's (2003) claim that many employers and professional bodies in Canada are making it unnecessarily difficult for racialized immigrants to access highly skilled occupations in Canada through the institutional sanctioning of their foreign credentials and work experience—a claim that reflects the views of the representatives of immigrant-serving agencies interviewed in his study. This “deskilling” process confines many foreign-trained individuals to support roles within their profession. In our study, this is most vividly illustrated by the finding that over 50% of respondents who were landed immigrants or Canadian citizens and whose “best job” in Canada was classified as in the social sciences, education, or government services were teaching or research assistants (Table 2)! Clearly, there is an urgent need to develop new policy initiatives to alleviate this “brain waste” (Reitz 2001, p. 349) and allow skilled immigrants to obtain employment that utilizes their training and experience more quickly and more fully (see Krahn et al. 2000 for similar recommendations with regard to refugees). Such policy changes are imperative because Canada cannot afford to undermine the benefits of current immigration policy by squandering valuable human capital in this way.

An important and unique aspect of our study was its focus on how skilled, mostly professionally trained workers experiencing ongoing credentialing problems react psychologically. The results summarized in Table 4 show that over half of the respondents have felt a loss of self respect and that their credentials are not valued in Canada at least some of the time, while Table 5 demonstrates how this ongoing stressful situation resulted in many respondents feeling a mixture of negative emotions including discouragement, sadness, and stress, as well as anger, bitterness, and resentment. Clearly, the actual employment opportunities available in Canada were not those that were anticipated and hoped for by the respondents when they made their decision to emigrate. We would argue, however, that the biggest negative psychological impact that credentialing problems create is the perception that Canadian employers and professional bodies are acting in a discriminatory manner

toward all immigrants. This is because results from this and a previous study (Grant 2007) show that the more that recent immigrants feel that immigrants in general face discrimination, the less they identify with their new country, Canada. Thus not only do employment barriers prevent integration into the Canadian workforce, but they also prevent immigrants from committing themselves to their new country and developing a strong Canadian national identity. Additionally, relative deprivation theory would predict that skilled immigrants who are not able to obtain suitable employment and who attribute this to discrimination against immigrants in general by Canadian employers (collective deprivation) are likely to engage in active and sustained protest actions. Given the substantial empirical support for this prediction for minority groups experiencing a variety of such collective deprivations (Dion 1986, 2001; Grant and Brown 1995; Grant 2005a; Runciman 1966; Walker and Smith 2002), it would seem that the drive to recruit increasing numbers of skilled immigrants from distant parts of the world has the potential to create substantial social unrest unless the credentialing issue is addressed.

From a different but complementary social psychological perspective, Berry and colleagues (Aycan and Berry 1996; Berry 1997) have used a general stress and coping model to argue that economic adaptation influences both psychological and sociocultural adaptation. That is, when skilled immigrants are able to find work in their profession, they are able to adjust better to daily life and to feel “at home” in Canada. Berry’s considerable work has shown that, generally, an integrative acculturative strategy results in the most positive psychological outcomes for new immigrants because they can develop a strong attachment to Canada while maintaining their bond with their heritage culture. Yet, the findings from this and earlier studies (Grant 2002, 2007) suggest that immigrants may not adopt this strategy if they face discrimination from Canadian employers. Clearly, this is an undesirable social outcome because Canada is a modern country that strongly endorses the value of multiculturalism and cultural diversity, not only in support of human rights but also as a means to achieve a competitive edge in an increasingly global economy.

More pragmatically, the fact that many respondents attribute their credentialing problems and associated underemployment to discrimination suggests that both federal and provincial governments and professional accreditation bodies should modify their existing policies to incorporate new procedures designed to integrate skilled immigrants into the Canadian labour market. This is because the respondents in our study were not distressed because Canadian employers did not accept their credentials immediately and without serious and prolonged scrutiny; rather, they were distressed because they did not know the path to take to overcome the credentialing problems that they faced. Indeed, it is our view that most skilled immigrants would welcome a serious evaluation of the merits of their foreign credentials provided that such an evaluation would direct them toward a retraining path that, if followed, would allow them to practice their profession again. We end, therefore, by recommending that the federal and provincial governments collaborate with professional accreditation bodies to place priority on the development of new policy initiatives that will provide highly trained immigrants with clear retraining paths to follow. In our view, it is imperative to work toward solving the accreditation problems of skilled immigrants if Canada is to benefit from their talents and experience and if they are to be fully accepted into the Canadian social fabric.

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Appendix

Table 6

Discriminatory barriers to integration

Perceived discrimination against immigrants in the Canadian labour market subscale (DAILM)

1. Canada needs to provide more government programs to help new immigrants find a job that matches their qualifications and work experience
2. Immigrants' education and work experience are often not recognized in Canada
3. In Canada, immigrants face discrimination from potential employers because they do not have Canadian experience
4. In Canada, immigrants face discrimination when they seek employment

Perceived discrimination against immigrants in Canadian society subscale (DAIG)

1. In Canada, immigrants face discrimination if they cannot speak English very well
 2. In Canada, immigrants face discrimination because of their accent
 3. In Canada, immigrants face discrimination because of their race
 4. In Canada, immigrants face discrimination because, when they arrive in Canada, they often have a low income
 5. Canadians do not appreciate the cultural background and traditions of immigrants
 6. Canadians feel that the education system in other countries is inferior
-

The scales used a five-point scale from "strongly disagree" to "strongly agree"

References

- Anisef, P., Sweet, R., & Frempong, G. (2003). Labour market outcomes of immigrant and racial minority university graduates in Canada. *Journal of International Migration and Integration*, 4, 499–522.
- Aycan, Z., & Berry, J. W. (1996). Impact of employment-related experiences on immigrants' psychological well-being and adaptation to Canada. *Canadian Journal of Behavioural Science*, 28(3), 240–251.
- Basavarajappa, K. G., & Jones, F. (1999). Visible minority income differences. In S. S. Halli & L. Driedger (Eds.), *Immigrant Canada: Demographic, economic, and social challenges* (pp. 230–257). Toronto: University of Toronto Press.
- Basran, G. S., & Zong, L. (1998). Devaluation of foreign credentials as perceived by visible minority professional immigrants. *Canadian Ethnic Studies*, 30(3), 6–23.
- Bauder, H. (2003). "Brain Abuses", or the devaluation of immigrant labour in Canada. *Antipode*, 35, 699–717.
- Berry, J. W. (1997). Immigration, acculturation, and adaptation. *Applied Psychology: An International Review*, 46(1), 5–34.
- Boyd, M. (1999). Integrating gender, language, and race. In S. S. Halli & L. Driedger (Eds.), *Immigrant Canada: Demographic, economic, and social challenges* (pp. 282–306). Toronto: University of Toronto Press.
- Brown, R., Condor, S., Mathews, A., Wade, G., & Williams, J. (1986). Explaining intergroup differentiation in an industrial organization. *Journal of Occupational Psychology*, 58, 273–286.

- Dion, K. L. (1986). Response to perceived discrimination and relative deprivation. In J. M. Olson, C. P. Herman, & M. P. Zanna (Eds.) *Relative deprivation and social comparison: The Ontario symposium* (vol. 4, pp. 159–179). Hillsdale, NJ: Erlbaum.
- Dion, K. L. (2001). Immigrants' perceptions of housing discrimination in Toronto: The housing new Canadians project. *Journal of Social Issues, 57*, 523–539.
- Grant, P. R. (2002). *The content and function of Canadian and cultural identities among first and second generation immigrants*. A final report to the Prairie Metropolis Centre. <http://www.pcerii.metropolis.net/>.
- Grant, P. R. (2005a). *Integrating social identity theory and relative deprivation theory to explain social protest: The prediction of protest actions taken by skilled immigrants in response to credentialing problems*. Paper presented at the annual meeting of the Social Psychology Section of the British Psychological Society, Edinburgh, Scotland, August.
- Grant, P. R. (2005b). *The devaluation of immigrants' foreign credentials: The psychological impact of this barrier to integration into Canadian society*. A final report to the Prairie Metropolis Centre. <http://www.pcerii.metropolis.net/>, November.
- Grant, P. R. (2007). Sustaining a strong cultural and national identity: The acculturation of immigrants and second generation Canadians of Asian and African descent. *Journal of International Migration and Integration, 8*(1).
- Grant, P. R., & Brown, R. (1995). From ethnocentrism to collective protest: Responses to relative deprivation and threats to social identity. *Social Psychology Quarterly, 58*(3), 195–211.
- Grant, P. R., McMullen, L. M., & Noels, K. A. (2001). *The content and functions of Canadian and cultural identities expressed by first generation immigrants*. A poster presented at the Seventh European Congress of Psychology, London, England. Book of Abstracts, 132, July.
- Grant, H. M., & Oertel, R. R. (1998). Diminishing returns to immigration? Interpreting the economic experience of Canadian immigrants. *Canadian Ethnic Studies, 30*(3), 56–76.
- Grant, H., & Sweetman, A. (2004). Introduction to economic and urban issues in Canadian immigration policy. *Canadian Journal of Urban Research, 13*, 1–24.
- Human Resources Development Canada (2001). National occupation classification. Retrieved October 1, 2005 from Human Resources and Skills Development Canada. <http://www23.hrdc-drhc.gc.ca/2001/e/generic/welcome.shtml>.
- Jackson, J. W., & Smith, E. R. (1999). Conceptualizing social identity: A new framework and evidence for the impact of different dimensions. *Personality and Social Psychology Bulletin, 25*, 120–135.
- Krahn, H., Derwing, T., Mulder, M., & Wilkinson, L. (2000). Educated and underemployed: Refugee integration into the Canadian labour market. *Journal of International Migration and Integration, 1*, 59–84.
- Li, P. S. (2000). Earning disparities between immigrants and native-born Canadians. *Canadian Review of Sociology and Anthropology, 37*(3), 289–311.
- Li, P. S. (2001). The market worth of immigrants' educational credentials. *Canadian Public Policy, 27*(1), 23–38.
- Li, P. S. (2003). Initial earnings and catch up capacity of immigrants. *Canadian Public Policy, 29*, 319–357.
- Liebkind, K., & Jasinskaja-Lahti, I. (2000). The influence of experiences of discrimination on psychological stress: A comparison of seven immigrant groups. *Journal of Community and Applied Social Psychology, 10*, 1–16.
- Mulder, M., & Korenic, B. (2005). *Portraits of immigrants and ethnic minorities in Canada: Regional comparisons*. Alberta: PCERII.
- Pendakur, K., & Pendakur, R. (2000). Ethnicity and earnings. In R. Pendakur (Ed.), *Immigrants and the labour force: Policy regulation, and impact* (pp. 159–191). Montreal: McGill-Queen's University Press.
- Picot, G. (2004). The deteriorating economic welfare of Canadian immigrants. *Canadian Journal of Urban Research, 13*, 25–45.
- Reitz, J. T. (2001). Immigrant skill utilization in the Canadian labour market: Implications of human capital research. *Journal of International Migration and Integration, 2*, 347–378.
- Runciman, W. G. (1966). *Relative deprivation and social justice*. London: Routledge and Kegan Paul.
- Schmitt, M. T., & Branscombe, N. R. (2002). The meaning and consequences of perceived discrimination in disadvantaged and privileged groups. *European Review of Social Psychology, 12*, 167–199.
- Statistics Canada (2003). *Canada's ethnocultural portrait: The changing mosaic*. Ottawa, Statistics Canada (Catalogue Number: 96F0030XIE2001008).

- Swim, J. K., & Stangor, C. (Eds.) (1998). *Prejudice: The target's perspective*. New York: Academic Press.
- Walker, I., & Smith, H. J. (2002). *Relative deprivation: Specification, development, and integration*. Cambridge: Cambridge University Press.
- Ward, C., Bochner, S., & Furnham, A. (2001). *The psychology of culture shock* (2nd ed.). Hove, East Sussex: Rutledge.

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