University of Alberta

Labour Market Outcomes of Immigrant Youth with After-migration Canadian Post-secondary Vocational Education

by

Lei Zhao

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Dedication

This thesis is dedicated to the Lord who is my light and to my beloved parents and grandmother.

Abstract

This study examined the labour market outcomes of the LSIC immigrant youth who completed after-migration post-secondary vocational education in Canada. Using the theoretical framework of discrimination theory and human capital theory, the study found that after four years of arrival, 1) Canadian work experience were positively correlated to immigrant youth's employment earnings, 2) pre-migration education and the type of Canadian vocational school both had an effect on the average family annual income, 3) neither visible minority status nor official language ability affected immigrant youth's employment earning, 4) immigrant youth who were very satisfied with their current jobs had higher employment earnings compared to others who were not very satisfied with their current jobs, 5) job satisfaction were associated with the utilization of qualifications and skills, and 6) visible minority immigrants were more likely to report underutilizations and to have lower job satisfaction.

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Disclaimer

The research and analysis were based on data from Statistics Canada and the opinions expressed do not represent the views of Statistics Canada.

Chapter One: Introduction

Over the past several decades the Canadian population has become more ethnically and culturally diverse that is due in large part to dramatically changed immigration patterns with people from non-European regions dominating the intake of immigrants. In 2005, Statistics Canada made demographic projections and suggested that by 2017, the visible minority population would increase to 20% of Canada's total population (Ravanera & Roderic, 2009).

Data from Citizenship and Immigration Canada (2010) shows that more and more recent immigrants fall into what may be referred to as the younger age group; about one-third consist of youth between the ages of 15 to 25, and 66% of immigrant youth are members of a visible minority group (Statistics Canada, 2008).

Immigration Selection System

In Canada and the United States, applicants for permanent residence status are admitted under one of the following categories: the Family, Refugee, or Economic. These categories reflect various social, humanitarian, and economic goals of both the applicants and the receiving country. Canada's immigration policy reflects its commitment both to promoting and to sustaining economic development. Immigration applications from professionals educated in foreign countries are reviewed year-round by the federal government officials to strategically select newcomers to Canada who

can meet labour market needs and respond to critical labour shortages (Citizenship and Immigration Canada, 2010a). A number of steps have taken by the federal government since the mid 2000s to make Canada's immigration system more responsive and flexible to the changing labour market needs. One of these steps addresses the expansion of the economic category, which includes skilled workers and professionals, provincial nominees, a special sub-category for sponsorship of family members of economic immigrants, Québec-selected skilled workers, the Canadian Experience Class (temporary foreign workers or foreign students who can master English or French well, have skilled work experience, and can contribute to Canadian society), investors, entrepreneurs, and self-employed people (Citizenship and Immigration Canada, 2008). In an effort to stimulate economic growth, in 2007, Canada admitted 131,248 economic category migrants (Becklumb, 2008) and the United States admitted 162,176 (Jefferys & Monger, 2008).

Immigrant Settlement and Integration

Citizenship and Immigration Canada (2011) differentiates between immigrant settlement and integration, describing the former as "short-term transitional issues faced by newcomers" and the latter as involving the "ongoing process of mutual accommodation between an individual and society" (p.24). Immigrant settlement and integration depends on a two-way process. Both immigrants and the receiving society undergo adjustment, and it is the interaction between these two that determines the outcomes of the settlement,

adaptation and integration processes (Xue, 2007). To respond to the challenges faced by immigrants during the processes of settlement and integration, the Government of Canada has developed various programs including Immigrant Settlement and Adaptation Program (ISAP), the Language Instruction for Newcomers to Canada (LINC), and the Host program (a volunteer-based program, designed to create and increase social connections among newcomers and established Canadian citizens and permanent residents) (Biles & Winnemore, 2006; Becklumb, 2008).

"A two-way street" and "common spaces". Integration in Canada can be interpreted as a "two-way street", which requires accommodation and adjustments, and rights and responsibilities, on the part of both recent immigrants and the citizens of the host society (Biles & Winnemore, 2006). Elucidating this point, Ewing (2012) states,

> Naturally, immigrants must harbor the desire to climb the socioeconomic ladder of success. But there must be a ladder for them to climb. If the community within which immigrants live and work makes the collective decision to deprive them of opportunities, then their upward mobility is hindered—to the social and economic detriment of the entire community. Yet, if the community actually welcomes newcomers and helps to facilitate their upward mobility, then the community eventually reaps the rewards of having workers and neighbors who are more highly skilled, more integrated, and more heavily invested in the community itself

(http://immigrationimpact.com/2012/09/14/immigrant-integration-is-a-to w-way-street/).

The recent realization of immigrant integration operationalized through the "two-way street" model often requiring newcomers to take most of the responsibility has directed researchers to develop the concept of "common space" (Dib, Donaldson, & Turcotte, 2008). Unlike the "two-way street" model, the conceptual framework of "common spaces" emphasizes where people mix in space and time, and together producing a new, shared identity for themselves as a community. In other words, social integration may be seen as a circulation process between persons, goods, ideas, and symbols within a system (Enns, Kirova, & Connolly, 2013).

Social inclusion and integration. Social inclusion involves the basic notions of belonging, acceptance and recognition. For immigrants, social inclusion is represented by the realization of full and equal participation in the economic, social, cultural and political dimensions of life in host-country (Xue, 2007). Ager and Strang's (2008) conceptual model of integration demonstrates that immigrants' achievement, relative to native-born, in the domains of employment, housing, education and health are often identified as indicators of successful integration. Achievements in these areas can exert a recursive influence whereby achievements in any one of these domains can lead to further accomplishments and integration (Enns, Kirova, & Connolly, 2013).

Omidvar and Richmond (2003) pointed out that Canada has been

experiencing serious and increasing difficulties in making full use of the skills and talents of newcomers in both the economic sphere and in public life in general. A number of recent studies indicate that the foreign work experience of entering immigrants is increasingly discounted in the Canadian labour market (Alboim, Finnie, & Meng, 2005; Aydemir & Skuterud, 2004; Simmons, 2010). For example, Picot (2008) stated that recent immigrants' foreign work experience appeared to be more heavily discounted now than it was 20 years ago, and that is particularly true for immigrants from the non-traditional source regions, such as Asia and Africa. Older immigrants who entered Canada in the late 1970s or early 1980s earned significantly more than their younger counterparts.

Immigrant youth and integration. Ravanera and Roderic (2009) demonstrated that the processes by which individuals integrate into the economic, social, and political fabric of society differs by age and life course stages. Young people, in their transition to adulthood, go through a number of events such as completion of schooling and entry into the labour force and this transition is influenced not only by individual and family characteristics but also by the structural and cultural contexts.

Purpose of Study

The purpose of the study is to gain a better understanding of the economic integration of youth immigrants in Canada. The need to conduct research on immigrant youth is based on the following: First, research suggests that being

a foreign-born in Canada has significant negative effects on employment among immigrant youth. For example, Wilkinson (2008) found that the unemployment rate of immigrant and refugee youth in Canada is approximately two times greater than native-born youth. Second, immigrant youth unemployment and underemployment impose a heavy cost upon individuals, employers, trade unions, governments and societies (ILO, 2002). Experiencing involuntary unemployment early in one's working life can have serious and lasting negative consequences, including permanently impairing employability. The "scarring effect" of unemployment (Clark, Georgellis, & Sanfey, 2001; Gunderson, Sharpe, & Wald, 2000) has come to be widely acknowledged. Early or past unemployment can lead to longer-term unemployment or even complete withdrawal from the labour force. Youth unemployment and low-wage jobs contribute to high levels of poverty (United Nations Department for Economic and Social Affairs, 2002). Third, the failure of so many immigrant youth to achieve meaningful inclusion in the contemporary Canadian labour market raises the issue of social exclusion (Shields, Rahi, & Scholtz, 2006). Feelings of exclusion and alienation may be a source of unsuccessful integration and social instability, and places individuals at higher risk for involvement in criminal behaviors (Wortley, 2009).

Chapter Two: Literature Review

Labour Market Outcomes of Immigrants

The economic and social outcomes of immigrants have been a major policy concern to many developed countries including Canada in which about one in five persons is foreign born (Statistics Canada, 2009). From 2002 to 2008, Statistics Canada released 64 research articles on immigration issues with 32 papers on economic integration (Picot, 2008). Galabuzzi (2005) argued that, among immigrants, "labour market attachment is critical to integration, identity formation, ability to claim a sense of belonging and ultimately, full citizenship" (p.53). In other words, labour market entry, as a critical step for most immigrants moving towards integrating into the host society, provides a key indicator of success in immigrant settlement and integration.

Empirical evidence of labour market performance of immigrants overwhelmingly showed a substantial gap between foreign-born and native-born Canadians (Ferrer & Riddell 2008; Green & Worswick, 2012) Alboim, Finnie and Meng (2005) stated that immigrants started with an overall earnings disadvantage of about 30%, and made up just a little below 3% of that gap over the first five years spent in Canada. Although the employment rates for immigrants increase with time spent in Canada (Xue, 2008), the employment rates are lower for various groups of immigrants than Canadian-born and this difference is attributed to the specificity of human capital acquired from the country of origin that usually cannot be directly transferred to the host country. Additionally, various types of discrimination

against immigrants may also be partially responsible for such a difference (Dahlstedt & Bevelander, 2010). Research shows that if immigrants have jobs, they often have jobs with lower status and consequently lower earnings than Canadian-born workers with the same amount of education and work experience (Alba & Nee, 2003; Hall & Farkas, 2008; Kogan, 2006). The fact of well-qualified immigrants holding low-paying jobs can also be explained by the lack of host country human capital. In addition, the host country often discriminates financially against immigrants; that is, immigrant workers are usually paid less than equally-productive Canadian-born workers (Statistics Canada, 2009). According to Picot, Hou and Coulombe (2007), low income rates of recent immigrants deteriorated after 2000. Using the Labour Force Survey data, Zietsma (2007) found that while established immigrants (those who entered Canada more than ten years ago) had comparable labour market outcomes compared to the Canadian-born population, very recent immigrants (those who have been in Canada for five years or less) had the poorest outcomes in the Canadian labour market.

Labor Market Disadvantage

Visible minorities. Immigrants' economic disadvantage has become an important issue in research studies and policymaking. Among socially disadvantaged youth, such as youth in the foreign-born visible minority group, generally experienced more problems obtaining employment, because they were less likely to obtain good basic education in their home country, and

were often discriminated against on the basis of social class and ethnic origin (ILO, 2002). Ethnicity has played an important role in predicting the odds of being employed among immigrants; for the youth from African, Caribbean, Chinese and Latin American countries, the odds of being employed are twice as low as for Canadian born youth (Sean et al., 2012). Pager (2007) also found that visible minority and immigrant youth lag behind the attainment of Caucasian, native-born youth in Canada and elsewhere in terms of income and occupational attainment. With respect to visible minority status, visible minority immigrants were significantly less likely to be employed and when employed, they were more likely to be employed in lower prestige occupations (Anisef, Sweet, & Adamuti-Trache, 2010). In addition, data from Norway (Brekke, 2007), Sweden (Rooth & Ekberg, 2002), and United Kingdom (Blackaby, Leslie, & Murphy, 2002) all showed ethnic minorities had less favorable labour market outcomes.

Immigrant youth. For many youth in general, there is a substantial waiting period for the first job; and for disadvantaged youth (Kunz, Milan, & Schetagne, 2000), such as immigrant youth, the wait is often longer. Similar to adult immigrants, a combination of unfavorable factors, human and social capital, and discrimination largely explains why immigrant youth face greater difficulty finding employment compared to native-born youth (Tuberge & Werfhorst, 2007; Zietsma, 2007).

Immigrant youth face similar challenges in adjustment and integration

processes as adult immigrants, including learning a new language, a new culture and way of life. However, some difficulties are unique to immigrant youth alone and that often is reflected in their labour market outcomes. Being less experienced in the labour market than adults, newcomer youth need to invest more time in job searching and job-worker matching process. Immigrant youths' lack of work experience in the labour market makes the transition from education or training to work particularly difficult for them (Wilkinson, Lauer, Sin, Tsang, & Yan, 2010). A study in 2008 showed that the employment rate of immigrant youths edged up 0.4% age points to 48.7%, but this increase was half that of the Canadian born youth, whose rise in employment far outpaced its increase in population (Gilmore, 2008). Moreover, although many older youth had secured full-time employment within four years after arrival, 30% of these respondents from the Longitudinal Survey of Immigrants to Canada (LSIC) reported either being dissatisfied with their job or actively looking for a new job (Sean, Wilkinson, Yan, Sin, & Tsang, 2012). Furthermore, an Organization for Economic Co-operation and Development (OECD) report provided comparable statistics on the unemployment of young immigrants and native-born aged 20 to 29. Regardless of their education levels, in 2007, the unemployment rate in all the OECD countries on average was about 9% for native-born and 15% for first-generation immigrants (Liebig & Widmaier, 2009).

Double jeopardy. A recently study found that the employment outcomes

of ethno-racial minority immigrant youth in the United States were less desirable than those of their counterparts from the dominant group (Yan, Lauer, & Chan, 2012). In other words, being an ethno-racial minority as well as from an immigrant family become a double jeopardy for those youth when they enter the competitive job market. For example, in the UK, the unemployment rates among ethnic minority youth men tend to be twice those of comparable men of British ancestry (Kallas, Fangen, & Paasche, 2011).

Discrimination

Discrimination describes unfair or different treatment on the basis of a group characteristic that results in negative consequences for that group (Dion, 2002). The Longitudinal Survey of Immigrants to Canada (LSIC) defines discrimination as occurring when people are perceived to be different from others and treated unfairly due to ethnicity, race, skin colour, language, accent or religion (Preston, Chua, Phan, Park, Kelly, & Lemoine, 2011).

Discrimination theory contends that ethnic minorities experience disadvantages in the labour market for reasons that 1) the employer believes that such backgrounds are associated with lower productivity, or 2) the employers, other employees or customers have an aversion to people with a minority background (Brekke, 2007). When employers are uncertain about the productivity of workers, they may make their hiring decisions on information about the average productivity of the groups to which the workers belong (Arrow, 1973). The employer may favor people with ethnic majority

backgrounds because on average such backgrounds are perceived to be associated with higher productivity, while cultural differences and poorer language skills among nonwestern minorities are considered by employers as being associated with lower productivity (Brekke, 2007). Reitz (2001) found significant underutilization of immigrant skills due to the failure of employers and licensing bodies to recognized immigrants' professional credentials and their tendency to discount pre-migration work experience.

Studies have shown that immigrants in Canada face discrimination beginning at the job application level (Reitz, 2001; Oreopoulos, 2009). Preston, Chua, Phan, Park, Kelly and Lemoine (2011) reported that holding education and experience constant, English-named job applicants had 40% higher interview request rates than applicants with foreign-sounding names, and visible minority immigrants are more than twice as likely as white immigrants to perceive discrimination with the control for gender, education and fluency in either of Canada's two official languages. The same study also showed that visible minorities who speak English or French fluently were more likely than white immigrants with comparable language abilities to report workplace discrimination, and immigrates who reported discrimination had less family income and lower job satisfaction than other immigrants. In addition, based on the findings of in-depth interviews of 82 immigrant youth in four cities in Canada and the LSIC data (Sean et al., 2012), immigrant youth reported facing ethnic discrimination and accent discrimination in the labour force. Perceived

discrimination can have negative impact on immigrant youth's occupational outlook and feelings of belonging in Canada.

Human Capital and Labour Market Outcomes

Research on immigration and integration has identified human capital as a key concept in explaining the labour market disparities between immigrants and native-born. Formal education, work experience, and on the-job-training are regarded as investment that increase the human capital of the individual (Becker, 1964). In other words, capabilities and skills accumulated or gained from education and labour market experience are part of an individual's productive capability. People with the same amount of human capital will have equal opportunities in the labour market (Becker, 1971). For immigrants, lack of host country-specific human capital places them at a disadvantage in the labour market.

According to previous studies, the two most obvious forms of country-specific human capital that are essential to labour market position of immigrants are language and education (Anisef, Sweet, & Adamuti-Trache, 2010). Individuals who arrived primarily from non-European regions are more socially, economically, culturally, and linguistically distinct relative to Canada than the European countries from which earlier waves of immigrants had arrived (Anisef, Sweet, & Adamuti-Trache, 2010).

Language ability. Citizenship and Immigration Canada (2010) stated that the most common non-official languages spoken among new immigrant youth

are Mandarin, Punjabi, Arabic, and Spanish. The ability to converse with fluency in an official language of the host country language not only enhances one's chances of fitting in, but prepares immigrant youth for future careers (Yee, Johns, Tarn, & Paul-Apputhurai, 2003). Simmons (2010) in his book *Immigration and Canada: Global and Transnational Perspectives* states "Canada may be a multicultural and multilingual country, but ability to communicate in English or French is nearly always essential for a better-paid job" (p.157). Individuals processing less proficient skills in either English or French are often prevented from fully utilizing or receiving the complete benefits of their educational qualifications and work skills (Alboim, Finnie, & Meng, 2005). Similar findings were also published by Galarneau and Morissette (2004).

Education. Through the 1990s and into the 2000s, there were notable changes in the characteristics of immigrants entering Canada. For example, the educational attainment of landed immigrants rose dramatically. The immigration selection system was altered to attract more well-educated economic immigrants, with a view to improving the match between the needs of the labor market and the skills of the immigrants, thus improving overall outcomes (Picot, Hou, & Coulombe, 2008). The percent of immigrants with university degrees among those aged 15 years or older rose from 16.9% in 1992 to 44.7% in 2004. According to human capital theory, it is generally presumed that immigrants selected on the basis of human capital will have

better economic outcomes. However, data from Labour Force Survey of Statistics Canada revealed that higher levels of education among newly arrived immigrants did not translate into a greater likelihood of entering labour market in Canada. The unemployment rate of recent immigrants with a foreign university degree was comparable to their counterparts with a foreign high-school diploma. By comparison, the unemployment rate of university-educated Canadian-born was roughly half that of Canadian-born with a high-school diploma (Gilmore 2008). Moreover, Picot and Hou (2003) concluded that immigrant poverty rates were on a continuous, long-term upward trend over the past two decades. Successive entering immigrant cohorts had successively higher poverty rates, even though the educational level of each successive cohort was rising rapidly. They also stated that the rise in poverty rates was widespread, occurring among recent immigrants from all age groups, whether they spoke an official language or not, in all family types, and at all educational levels. The gap in the poverty rate between recent immigrants and the Canadian-born was highest among university graduates; in spite of the purported opportunities created by the "knowledge-based economy," having a university degree did not protect recent immigrants from the increased likelihood of being low-income, regardless of their field of study.

For immigrants, it is important to distinguish between schooling that took place in home-country and schooling in host-country. In order to utilize pre-migration education, the individual needs to have his or her education

recognized or acknowledged by the receiving society. Findings consistently indicate more positive outcomes among immigrants who obtained education credentials in the destination country or in economically similar countries (Admauti-Trache & Sweet, 2005; Mata, 2008). When employers have inadequate information on either the level or the type of the individual's education accomplished in their home-country, the experience tends to be discounted or not recognized, with the result that immigrants can experience unemployment or underemployment after migration (Dahlstedt & Bevelander, 2010).

Devaluation of Home-country Specific Human Capital

Research using the Longitudinal Survey of Immigrants to Canada (LSIC) indicated that the major difficulties for recent economic-categoried immigrants were employment-related; the lack of recognition of foreign academic and professional accreditation and foreign work experience were most frequently reported as an impediment in finding suitable employment in Canada (Schellenberg & Maheux, 2007). Aydemir and Skuterud (2004) found that one-third of the drop in entry earnings of recent immigrants appeared to result from non-recognition of foreign labor market experience. Alboim, Finnie, and Meng (2005) also pointed out the issue of discounting foreign work experience; a year of foreign-obtained experience being worth only about one-third of what Canadian-based experience was worth.

Skills discounting, which refers to the devaluation of foreign experience

and credentials, occurs for a number of reasons. For example, the quality of the education and experience credentials held by immigrants is, on average, lower than that of native-born Canadians, and/or the particular type of education or work experience possessed by some immigrants is not well suited to the Canadian economy (Alboim, Finnie, & Meng, 2005). Alternately, employers likely have imperfect information on the migrant's source country, especially as source countries shift from European to Asian and African. It is unrealistic to expect Canadian employers to know, or even take the steps required to determine the quality of international educational institutions, the curriculum of those institutions' academic programs, and the relevance to the Canadian labor market of the skills imparted to their graduates (Simmons, 2010). In response to this uncertainty, Canadian employers may adopt a risk-averse strategy, giving preference to Canadian experience and accreditations. There is evidence to suggest that there is considerable variance in the quality of foreign earned credentials (Sweetman, 2004). In some cases, while the title of the foreign credential may be the same as one conferred in Canada, that foreign credential's actual contribution to Canadian labor market productivity is significantly less. This discrepancy certainly warrants caution from Canadian employers (Somerville & Walsworth, 2009).

Finally, the point system of immigrant selection is a federal policy, whereas labor market regulations are largely a provincial matter, with those regulations or standards established variously by the employer, by sector

councils, or by occupational and professional groups. The lack of commonly recognized professional standards honored by both the federal government and the provinces creates obstacles even for immigrants with legitimate foreign credentials and work experience (Aydemir & Skuterud, 2004).

Host Country Schooling

Immigrants can gain host country-specific skills outside schools, through interaction with friends, neighbours, and co-workers, as well as through the media (van Tubergen & Kalmijn, 2009), while host country educational institutions systematically provide opportunities to acquire both formal and informal skills that are valued in the labour market, and they deserve closer attention in studying what factors contribute to immigrant economic integration (Adamuti-Trache, 2010).

To a large extent, the structure of the Canadian post-secondary system is favorable to further education and life-long learning (Adamuti-Trache, 2010). Canadian post-secondary education institutions respond positively to the population of young adult immigrant student that is essential in aiding these students to make successful transitions, both within PSE institutions and the society at large (Anisef, Sweet, & Adamuti-Trache, 2010). According to a study based on the LSIC wave 1, the vast majority, about 89% of newcomers reported that it was crucial to their future to further their education or training in Canada, and 45% of newcomers actually took education or training courses 6 months after landing (Statistics Canada, 2005a). Another study based on the

same data source showed that being motivated by their difficulties and challenges they face in securing employment in their intended occupations, many recent immigrants turned to some forms of postsecondary education after arriving in Canada (Anisef, Sweet, & Adamuti-Trache, 2010). In addition, Zietsma (2007) stated that even the most educated immigrants could face difficulties upon landing in Canada, because of the lack of host-country specific skills. Many respondents from LSIC completed a university-level baccalaureate degree in their countries of origin, and decided to pursuit further education or training after arriving in Canada (Adamuti-Trache & Sweet, 2010).

Increasing human capital. Education obtained in the host country which is often more compatible with skills required in the labour market of that country than might be obtained through foreign education, improves individuals' productivity (Friedberg, 2000). With lower information costs and risks, employers are more likely to evaluate highly those individuals holding host country educational credentials (Kanas & van Tubergen, 2009; Kanas, van Tubergen, & van der Lippe, 2009; Zeng & Xie 2004).

Increasing social and cultural capital. Host country schooling can positively affect newcomers' productivity by increasing their human capital, as well as their social and cultural capital that ultimately prove economically advantageous (Anisef, Sweet, & Adamuti-Trache, 2010). The absence of social networks, cultural disparities in customs, values, and attitudes, and a shortage

of informal labour market skills were found to hinder the labour market potential of immigrants (Li, 2004; Walters, Phythian, & Anisef, 2007). Enrolling in schools in the host-country, immigrants obtain opportunities to interact with native-born students and faculty, improve language proficiency and gain familiarity with the host society, which may not come so easily to newcomers who do not attend school after arrival (Kanas & van Tubergen, 2009; Kunz, 2003). Additionally, participation in extracurricular activities permits the formation of networks among individuals of different social, economic, and cultural backgrounds (Kunz, 2005). The networks or the diverse relationships with host communities created by these bridging activities enable individuals to access resources that might otherwise be unavailable to them (Anisef, Sweet, & Adamuti-Trache, 2010). Moreover, Enns, Kirova, and Connolly, (2013) stated that bridging activities which represented an attempt to create common spaces outside of self-identified ethnic groups, had a positive effect on integration in terms of social trust and sense of Canadian identity.

Vocational Education

Internationally, the term Technical and Vocational Education and Training (TVET) refers to vocational education provided in secondary school programs, in vocational training centers and in other post-secondary institutions such as technical institutes and polytechnics. These programs are designed to prepare students for direct entry to a particular occupation or trade, and usually lead to

a labour-market vocational qualification that is recognized by relevant authorities (Government of Canada, 2012).

Vocational education in Canada refers to a multi- year program or series of courses providing specialized instruction in a skill or a trade intending to lead students directly into a career or program based on that skill or trade. It is offered both in secondary schools and at the postsecondary level in public colleges and technical institutes, some for-profit colleges, and in the workplace, through apprenticeship programs (CMEC, 2008). Postsecondary institutions provide different credentials depending on the nature of the institution and the length of the programs. Public colleges, specialized institutes, community colleges, institutes of technology and advanced learning, and *Collège d'enseignement général et professionnel* (CÉGEP), in English, *General and Vocational College* offer vocationally oriented programs in a wide range of professional and technical fields, including: business; health; science; agriculture; applied arts; electronic, paramedical and computer technology; plumbing, carpentry and other skilled trades; and social services. Some specialized institutes offer training in a single field, such as art, fisheries, paramedical technology, or agriculture (CICIC, 2009). As with other areas of education, vocational education is the purview of the provinces. In consequence, there are often differences in programs and institutions between provinces.

In the 2007 meeting of OECD education ministers on vocational

education and training, Dr. Diane McGifford, the Minister of Advanced Education and Literacy for Manitoba, introduced the topic of social cohesion and equity in terms of vocational education in Canada. She also discussed the general agreement that an inherent tension exists between TVET as a social equity tool that helps those who would otherwise be marginalized and the idea that TVET should be highly esteemed and accepted as such by employers (Council of Ministers of Education, 2007). The Red Seal Program that was initiated several decades ago by the federal government represents industry's recognition of an interprovincial Standard of excellence for the skilled trades. To date, 55 trades are included in this program, accounting for almost 90% of all apprentices and more than 80% of the total trade workforce in Canada. Affixed to one's provincial and territorial certificates of qualification, a Red Seal endorsement provides assurance that workers are qualified according to common standards of knowledge and competency as defined by industry and that their certifications are recognized by employers across Canada without further examination (Employment and Social Development Canada, 2013; Service Canada, 2013).

Questions and Hypotheses

Research indicates that post-secondary education (PSE) obtained in Canada is a particularly effective means of enhancing immigrants' position in the labour market (Adamuti-Trache & Sweet, 2005; Li, 2001; Sweetman & McBride, 2004). University-level training is popular among immigrants in the

younger age groups. For example, 43% of newcomers aged 15 to 24 years who intended to obtain further schooling were interested in university-level training (Statistics Canada, 2003). However, the labour market experiences of immigrant youth who obtained non-university, post-secondary vocational education in Canada are greatly underrepresented in previous studies when compared to their peers with university or college degrees.

To gain a better understanding of the labor market integration of youth immigrant with Canadian post-secondary vocational education and training, this study addresses the following research questions: 1) Are there significant variations in immigrant youth's labour market outcomes associated with their visible minority status? Specifically, do vocational graduates of foreign-born non-visible minorities report higher job satisfaction and employment earnings than their foreign-born visible minority peers? 2) Are there significant variations in employment earnings associated with one's pre-migration education? 3) How does each of the host country human capital indicators, official language ability, Canadian work experience and the type of vocational school affect immigrant youth's employment earnings, job satisfaction and qualifications/skills utilization? 4) Do employment earnings of relate to job satisfaction and qualifications/skills utilization? 5) Among visible minority status, foreign education, and all three human capital indicators of host country, which factor or the combination of the factors is best associated with and predicts immigrant youth's employment earnings after their first four years of

arrival?

Based on the literature reviewed for the current study, the following hypotheses are proposed: a) employment earnings will be influenced by the variable of visible minority status; immigrant vocational graduates of color will report lower employment earnings than their non-visible minority peers; b) the levels of pre-migration education will positively affect earnings; c) immigrant youth who speak English or/and French fluently will report higher employment earnings than others who have lower language ability; d) Canadian work experience will have a positive influence on employment earnings of immigrant youth; e) higher employment earnings will relate to higher ratings on job satisfaction and utilization of qualifications/skills; and f) visible minority status, pre-migration education, official language ability, the type of Canadian vocational school and work experience will serve as predicators of immigrant youth's employment earnings.

Chapter Three: Method

Data: Longitudinal Survey of Immigrants to Canada (LSIC)

The data used in this analysis were taken from the Longitudinal Survey of Immigrants to Canada (LSIC). Specifically, the short-term employment outcomes of recently immigrant youth were accessed.

LSIC is the first national longitudinal survey conducted with the recent immigrant population since the 1970s. The survey is designed to study how newly arrived immigrants adjust to life in Canada during their first four years.

It includes a sample of immigrants and refugees aged 15 years and older who arrived in Canada between October 2000 and September 2001. The survey involved a longitudinal design, with the same individuals interviewed at three different times: six months (2001), two years (2003) and four years (2005) after landing in Canada from abroad. The sample design was developed using a "funnel-shaped" cohort approach; only immigrants that responded to the Wave 1 interview were traced for the Wave 2 interview and only those that responded to the Wave 2 interview were traced for the Wave 3 interview. A representative sample of approximately 20,300 new immigrants to Canada was selected at Wave 1 to produce reliable estimates. 9,300 of them participated in the Wave 2 interview, and 7,700 had taken the Wave 3 interview. The final sample represents 157,600 immigrants of the above-mentioned population (user guide-wave 3, 2007).

Sample of the Present Study

This study only focuses on the older immigrant youth aged 19 to 29 at arrival, and not on younger youth aged 15 to 18. There are two reasons for focusing on this particular age group. First, the younger youth are likely to be enrolled in high schools or other secondary education programs. Second, when compared to those who arrived after the age of 18, the earning power of immigrants who arrived in Canada before the age of 18 was very close to their native-born peers (Ferrer & Riddell, 2004). Therefore, this study examined the population of immigrant youth who meet both of the two following criteria:

- Were aged 19 to 29 at the time of landing
- Completed post-secondary vocational education or training in Canada within four years of arrival

As noted previously, the key research question to be addressed is: how visible minority status, pre-migration education, after-migration Canadian vocational schooling, Canadian official language ability, and Canadian work experience impact the labour market outcomes among recent immigrant youth aged from 19 to 29 at arrival?

Data Analysis

The LSIC is based upon a complex sample design, with stratification, multiple stages of selection, and unequal probabilities of selection of respondents that affects the estimation and variance calculation procedures. In order to have the estimates derived from the microdata files be representative of the survey population and be free from bias, the use of a replicated method, namely the bootstrap method was recommended by the LSIC wave 3 user guide (p.75).

The software, SAS (Statistical Analysis System) v.7-8 Windows long extension was used in this study. A 1000 bootstrap replicate weight was used when producing simple estimates, including the production of all statistical tables. Data analysis was conducted in four distinct steps. First, descriptive statistics and frequencies were calculated for the socio-demographic information for all immigrant youth aged 19 to 29 at arrival and who

completed vocational education within their first four years of arrival. Second, since measuring statistical association depends on the level of measurement of the variable, crosstabs and chi-square tests between any of the two categorical variables were examined. One-way Analysis of Variance (ANOVA) tests were used in detecting the relationship between a continuous dependent variable and a categorical independent variable, for example a test on "visible minority status" and the dependent variable "hourly wage" was conducted. Third, Main Effect ANOVA analyses were conducted to compare the impact of all the independent variables on continuous dependent variables. Fourth, in multiple regression analysis, all the potential predicators were included to predict immigrant youth's employment earnings after four years of landing in terms of "wave 3 average family annual income" (IN3) and " hourly wage" (HW3). As shown in the following equation, Both IN3 and HW3 were computed as:

$Y=\alpha_1 + \beta_1(visible\ minority\ status) + \beta_2(pre\text{-}migration\ education) + \beta_3(type\ of\ after\text{-}migration\ vocational\ school) + \beta_4(official\ language\ ability) + \beta_5(Canadian\ work\ experience) + controls.$

Dependent Variable

The concept of "labour market outcomes" can cover various aspects such as wages and earnings, occupation, employment or unemployment status, participation in the labour market, hours of work, and temporary or permanent status. Earnings, in particular, are considered an important dimension of labour market outcomes (Statistics Canada, 2012). In this study, the term "labour

market outcome" generally refers to the hourly wage of the job respondents worked the most hours after six months of landing (at wave 1 interview) and after four years of landing (at wave 3 interview), average family annual income from jobs inside Canada in the last 12 months at wave 3 interview, job satisfaction and qualifications/skills utilization with current job at wave 3 interview. "Hourly wage" and "average family annual income" were kept as continuous variables and each variable was computed as shown below:

Hourly wage = Weekly earnings / Number of hours currently worked per week

*= Bi-weekly earnings / (Number of hours currently worked per week*2)*

*= Monthly earnings / (number of hours currently worked per week*4.3)*

(The value of 4.3 in the equation refers to the average number of weeks in a month of a year).

*= years earnings / (Number of hours currently worked per week*52)*

Average family annual income = Family annual income from jobs inside Canada / Number of members in household

The number of members in household was the same as the count of members in respondents' economic family. According to LSIC's wave 3 user guide (2007), economic family refers to "a group of two or more persons who live in the same dwelling and are related to each other by blood, marriage,

common-law or adoption" (p.11).

The other two variables "job satisfaction" and "qualification/skill utilization" were ordinal; more specifically "job satisfaction" was collected using Likert-type rating scales (1=very satisfied, 2=satisfied, 3=dissatisfied) and while "qualification/skill utilization" had two categories (1=adequately used, 2=underused).

Independent Variable

The two primary independent variables are visible minority status and human capital (see Figure 1). Visible minority refers to "persons, other than Aboriginal peoples, who are non-Caucasian in race or non-white in colour" (user guide -wave 1). Human capital was measured by three indictors – highest level of pre-migration education, after-migration vocational schooling, Canada's official language ability and Canadian work experience. After-migration vocational schooling referred to the type of vocational education, either trade school/apprenticeship or college/CÉGEP; and the number of weeks at work within four years of landing were selected to access the respondents' Canadian work experience. LSIC respondents were asked to report, at all survey times, their level of competence in English and French. The "official language ability" variable which was selected for this study indicated speaking skills in English or French at wave 3 interview (four years after arrival in Canada). All respondents of LSIC were asked to indicate how well they can speak English and French (see Appendix). The speaking skills

categories were recoded to distinguish between those respondents who spoke English or French very well, and those spoke well, spoke fair well, spoke poorly or not at all.

The control variables include gender, and entry category of immigration that was categorized into three entry categories: "family category", "economic category" and "other". Canadian work experience was the only non-categorical independent variable and was kept it as a continuous variable. This is done because modifying originally continuous variables into artificially categorized variables can lead to substantial loss of information and erroneous statistical conclusions (DeCoster & Gallucci, 2009). To include the nominal variables in the regression model, visible minority status, gender, immigration category, after-migration vocational education, language ability, and highest pre-migration education level were all coded as dichotomous variables.

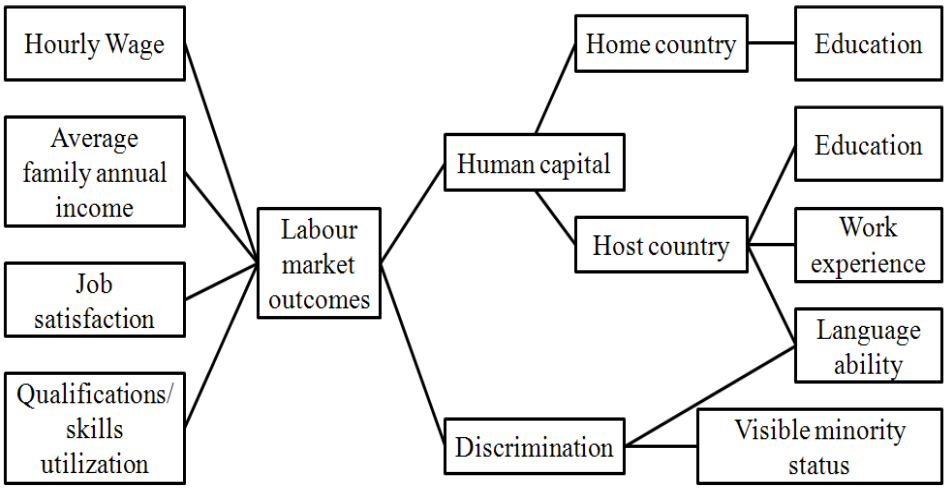

Figure 1. Model used in the present study.

Chapter Four: Results

Social-demographic Characteristics

Table 1

Socio-demographic characteristics of immigrant youth aged 19 to 29 with after-migration Canadian post-secondary vocational education

Characteristic	%
Male	37.6%
Immigration category	
Family	33.3%
Economic	61%
Refugees	5.7%
Visible minority	80%
Highest level of pre-migration education	
high school or less	14%
Post-secondary vocational education	29.4%
Undergraduate or higher	56.6%
Post-migration vocational education	
Trade certificate or apprenticeship completed	28.4%
College/CÉGEP diploma or certificate	71.6%
Language ability (Can speak English or French very well)	57%

Note: weighted n=4429.

As shown in Table 1, more female immigrant youth than male immigrant youth completed vocational training within four years of arrival, and 80% of

the vocational graduates identified themselves as visible minorities. Among the immigrant entry categories, economic category immigrants including skilled workers and business immigrants made up 61% of the sample. College/CÉGEP graduates (71.6%) outnumbered immigrant youth who completed vocational education from trade schools or apprenticeships. The majority of youth immigrants with host country vocation education had some or finished post-secondary education before coming to Canada. More than half (57%) of the sample reported that they could speak either or both Canada's official languages fluently.

Crosstab procedure revealed that white immigrant youth and immigrant youth with visible minority status had similar language ability; for each racial group, about 57% of respondents reported that they could speak either or both English and French very well. Additionally, visible minority immigrant youth made up 77% of the trade schools or apprenticeship graduates and 81% of colleges/CÉGEPs graduates.

Job Satisfaction and Utilization of Qualifications and Skills

In general, 23.6% of those sampled were very satisfied with their current job after four years of arrival, 65% were satisfied and 11.4% were dissatisfied. In regard to how well their qualifications and skills were utilized, 35.4% of the sample reported underutilization. Table 2 summarizes immigrant youth's reports on the level of satisfaction with their jobs and on qualifications and skills being adequately used in their jobs after four years of landing. 77.9% of

female immigrant youth were not very satisfied with their current job and 28.8[M]% (M indicates that estimates have high coefficients of variation in the

Table 2

The Summary of job satisfaction and utilization of qualifications/skills after four years of arrival by gender, visible minority status, immigration category, and Canada's official language ability

	Very satisfied	Adequately used
Gender		
Female	22.1%[M]	71.2%
Male	25.9% [M]	54.4 %[M]
Visible minority status		
White	33.9% [M]	73.4%
Visible minorities	20.8% [M]	62.3%
Immigration category		
Economic category	22.7%	63.6%
Family category and refugee	25% [M]	66.3% [M]
Language skill		
Very well	25.9% [M]	64.2%
Not very well	20.3% [M]	65.2%

Note: M indicates that estimates have high coefficients of variation in the range of 16.6%-33.3%.

range of 16.6%-33.3%) reported the underutilization of their qualification and

skills in their jobs. 74.1% of male immigrant youth were not very satisfied with their current job and 45.7% reported their qualifications and skills as being underused.

Job satisfaction and qualifications/skills utilization were very similar between the economic-categoried immigrant youth and the other immigrates. Among immigrate youth with visible minority status, 79.2^{M} % were not very satisfied with their current job after four years after landing, this was more than 1 person out of 3. 26.6^{M}% of white immigrant youth, compared to 37.7^{M}% of visible minority immigrant youth reported underutilization of qualifications/skills at the time of wave 2 interview. Regardless of their pre-migration education background, 29.5^{M}% of the immigrant youth graduated from trade schools or apprenticeships after migration, compared to 37.8% of college/CÉGEP graduates reported their qualifications and skills being under used in their jobs after four years of arrival.

Chi-square tests for independence showed that job satisfaction was significantly associated with qualification and skills utilization $X^2(1, 1000) = 21.17$, $p =<.0001$. The relation between immigrant entry categories and highest pre-migration education levels was significant as well, $X^2(1, 1000) = 5.755$, $p =.016$. Among immigrant youth with pre-migration PSE or higher education, 64.6% were in the economic category.

Hourly Wage and Average Family Annual Income

Six months after arrival in Canada, the mean hourly wage of the young

immigrates was $10.47 (SE=0.67) in 2001 dollars and the mean hourly wage increased to $14.63 (SE=0.52) in 2005 dollars four years after arrival with the mean average family annual income of $19,813.00 (SE=1279.5) in 2005 dollars.

One-way ANOVA tests revealed that there were no significant difference across immigration categories among wave 1 hourly wage $F(1,1000) = 1.82$, $p = 0.22$; however, after four years after landing, the mean hourly wage of immigrant youth in economic category was significantly different than the mean hourly wage of family category immigrant youth or refugees $F(1,1000)=7.16$, $p=.0076$. Additionally, there was a significant gender difference in both wave 3 hourly wage $F(1,1000)=12.29$, $p=.0006$ and Canadian work experience $F(1, 1000)=5.39$, $p=.0214$.

The mean of wave 3 hourly wage $F(2,1000)=12.53$, $p<.0001$ and average family annual income $F(2,1000)=5.3$, $p=.0061$ differ significantly across the levels on job satisfaction. Analysis of contrast suggested that the wave 3 hourly wage of respondents who reported very satisfied with current job was significantly different from the ones reported satisfied or dissatisfied; the same difference also was found with the wave 3 average family annual income.

Factors Affecting Earnings

From the main-effect ANOVA tests, the independent variables gender, immigration category, visible minority status, highest pre-migration education

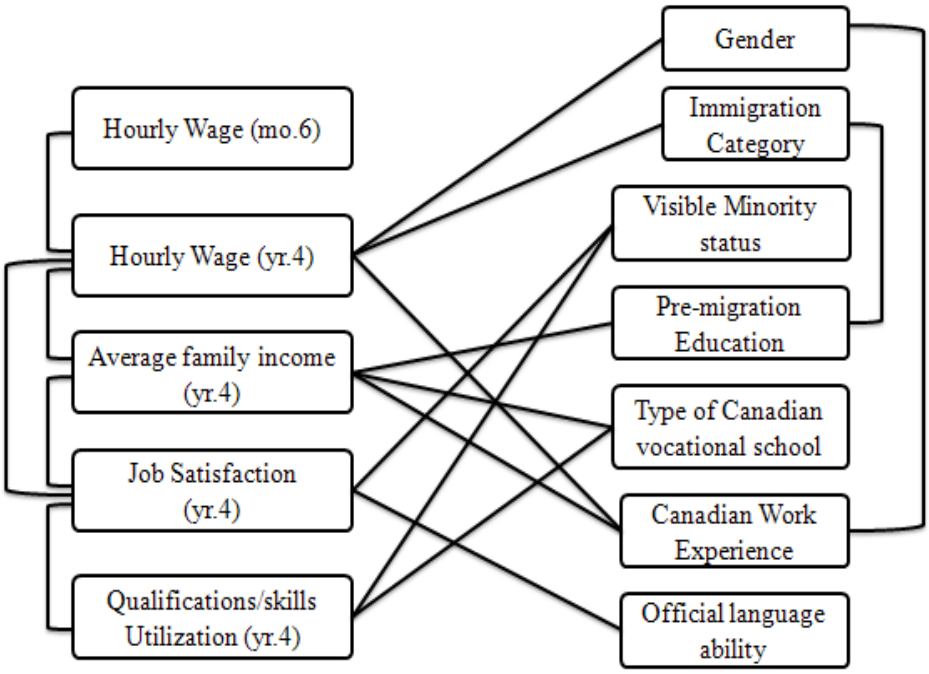

Figure 2. Summary of the findings of the present study.

level, after-migration vocational training, official language ability and Canadian work experience as a set showed a relationship to the dependent variables (see figure 2), Wave 3 hourly wage $F(7, 145) = 5.2$, $p < .0001$; however, only gender $F(1, 1000)=6.49$, $p=.011$, immigration category $F(1, 1000)=4.32$, $p=.0379$, and Canadian work experience $F(1, 1000)=11.28$, $p=.0008$ are significant. This indicated that even after the other variables have been taken into account, in the end gender, immigration category and Canadian work experience were the only three variables that accounted for a significant portion of variance in the Wave 3 hourly wage. In this study, the same set of independent variables also showed a relationship to wave 3 average family annual income $F(7, 1000)=4.32$, $p=.0002$, and there were significant main effects for highest pre-migration education level

$F(1,1000)=17.22$, $p<.0001$, the type of after-migration vocation schooling $F(1,1000)=4.68$, $p=.0307$ and the length of Canadian work experience $F(1,1000)=8.66$, $p=.0033$ were significant.

Regression Model

In addition to the Main Effect ANOVA tests, regression models were included in this study not to predict the earnings that immigrant youth will make but to examine how close the study can get to describe the earnings that immigrant youth did make. The simple regression analyses showed evidence of a significant linear relationship between wave 1 hourly wage and wave 3 hourly wage $b = .67$, $t(1000) = 6.18$, $p < .0001$. As wave 1 hourly wage increased by one unit, wave 3 hourly wage increased by 67 cents. Wave 1 hourly wage explained a significant proportion of variance in wave 3 hourly wage, $R^2 = .3666$, $F(1, 1000) = 46.33$, $p < .0001$. With the correlation coefficient, the $r = .605$, we concluded that the correlation was moderate between wave 1 hourly wage and wave 3 hourly wage. Moreover, wave 3 hourly wage significantly predicted the natural logarithm of wave 3 average family annual income, $b = .06$, $t(1000) = 5.71$, $p < .0001$. As wave 3 hourly wage increases by one unit, wave 3 average family annual income increases by 6%. Wave 3 hourly wage also explained a significant proportion of variance in the natural logarithm of wave 3 average family annual income, $R^2 = .1539$, $F(1, 1000) = 32.56$, $p < .0001$. With the correlation coefficient, the $r = .392$, it was concluded that the correlation was moderate between wave 3 hourly wage and

the natural logarithm of wave 3 average family annual income.

Table 3

Summary of multiple regression analysis predicting hourly wage after four years of arrival

Variable	B	SE B	t Value	p
Visible minority status	-1.78	1.23	-1.44	.1493
Immigration* Pre-migration education	2.73	.98	2.77	.0056*
After-migration vocational education	-1.02	1.21	-.85	.3978
Language skill	.96	.97	.99	.3218
Gender* Work	.04	.01	3.18	.0015*

Note: weighted n=3727; R^2=.171; *p<.05

Gender and immigration category as two control variables were included in the multiple regression analysis of wave 3 hourly wage, because the results indicated that immigration category was related to both the highest pre-migration education level and the wave 3 hourly wage, and gender had an effect on the wave 3 hourly wage and also was related with Canadian work experience whose effect was one of the key factors of the study. The predictor variables as shown in Table 3, produced R^2 =.171, $F(5, 1000)=6.6$, $p < .0001$. Only the regression coefficients of the interaction of immigration category and highest pre-migration education level and the interaction of gender and Canadian work experience were statistically significant. For male immigrant youth from economic category and with pre-migration post-secondary

education, it was expected to see about a $2.77 dollars increase in their wave 3 hourly wage as work experience increases by one unit.

Table 4

Summary of multiple regression analysis predicting the average family annual income after four years of arrival

Variable	B	SE B	t Value	p
Visible minority status	-.15	.17	-.87	.3848
Pre-migration education	.40	.16	2.48	.0134*
After-migration vocational education	-.31	.18	-1.81	.0703
Language skill	.22	.16	1.37	.1706
Work	.01	.002	3.06	.0022*

Note: weighted n=3722; R^2=.146; *p<.05

Another multiple regression model testing the relationship between the natural logarithm of wave 3 family average income and the five predictors following, visible minority status, highest pre-migration education level, after-migration vocational training, official language ability and Canadian work experience revealed that the overall model was statistically significant R^2=.146, F(5, 1000)=5.56, P<.0001. As shown in Table 4, only the regression coefficients of the two predictor variables after-migration vocational education and Canadian work experience were statistically significant. Switching from immigrant youth with pre-migration post-secondary or higher education to those with pre-migration high school or less education, it was expected to see

about 40 % increases in wave 3 average family annual income as work experience increases by one unit.

Chapter Five: Discussion

Recent Immigration Dynamic

In the last two decades, immigrants have been entering Canada from very different countries. From 1981 to 2001, the share of immigrants from Eastern Europe, South Asia (India, Pakistan), East Asia (China, Korea, Japan), West Asia (Iraq, Iran, Afghanistan) and Africa increased from 35% to 72% (Picot, 2008). The majority of the respondents, about 80% in this study identity themselves as a member of the visible minority population that reflects the recent immigration dynamic.

In Canada and the United States, applicants for permanent residence status are admitted under three main categories meeting various social, humanitarian, and economic goals. The three categories being: Family; Refugee; or Economic. In 2007, Canada admitted 131,248 economic Category migrants (Citizenship and Immigration Canada, 2008a & 2008b) in an effort to improve the quantity of available labor. Nearly two-thirds of the immigrant youth in this study entered Canada in the economic category that matches the recent immigration trend.

"Ready-to-Wear-Immigrant"?

Since Citizenship and Immigration Canada introduced significant changes to the selection rules in the early 1990s, the educational attainment of

immigrants rose dramatically; over the past 15 years, immigrants had become more highly educated than the Canadian born population (Picot, 2008). However, with the immigration selection system seeking applicants on the basis of human capital such as education, and thus attempts to minimize the need for settlement and integration services, there is no such thing as a "ready-to-wear immigrant" (Biles & Winnemore, 2006). Back to the early 2000s, Reitz (2001) argued that in spite of the rising educational levels of immigrants, their relative advantage in educational levels had declined as a result of the more rapidly rising levels of education among the Canadian born. In this study, more than half of the immigrant youth who completed vocational trainings within four years in Canada, had pre-migration university or higher education. Similar to previous research findings, this finding also suggests the discounting of foreign academic credentials and the importance of host-country schooling for this group to enter employment.

Implications on Canada's immigration selection system. The point system has treated all foreign university or college degrees equally, no matter whether obtained from a leading university or a small school (Bonikowska, Hou, & Picot, 2011). Developing a distinction in the selection system among different groups of foreign universities may improve the recognition of certain foreign academic credentials. Moreover, the federal government may consider increasing the proportion of highly educated and highly skilled immigrants who are employer nominated (Bonikowska, Hou, & Picot, 2011). Per-arranged

employment opportunities and workplace English or French training may lead to higher returns to the human capital that immigrants bring with them while increasing immigrants' host country specific human capital.

Country Specific Human Capital

Host-country human capital consists largely of education, language proficiency and the skills developed through work experience. Both pre-migration education and host country vocational schooling were discussed as human capital indicators in this study. The results from the main effect ANOVA test showed that neither the highest pre-migration education level nor the type of Canadian vocational education had an impact on immigrant youth's hourly wage after four years of arrival. On the other hand, these factors both have a significant main effect on average family annual income after four years of arrival.

Language ability. It is well understand that language and communication skills are related to productivity, and hence to the wages of workers (Picot 2008). Compare to decades ago, fewer entering immigrants have a mother tongue that is either English or French. Official language knowledge and literacy skills have a direct effect on their labour market outcomes and may also have an indirect effect by mediating the use of foreign human capital in the Canadian context (Goldmann, Sweetman, & Warman, 2009). However, among the vocational graduates in this study, language fluency did not make a difference in either of their hourly wage or average family annual income after

four years of landing. One of the possible explanations is that vocational programs usually have lower admission requirements including English proficiency requirements compared to degree programs and that the related occupations are practical-skills focused which tend to be less dependent on literacy skills. In regards to job satisfaction, immigrants speaking fluent official language were more likely than other with lower speaking skills being very satisfied with their job at the time of wave 3 interview.

Work experience. When immigrants enter labor market in the host-country, the human capital acquired from non-traditional source countries may be less transferable because of the potential issues of language, cultural differences, education quality and discrimination (Picot, 2008). According to Statistics Canada (2009), when only immigrant's Canadian work experience was taken into account, their earnings were more similar to those of the Canadian-born with the same years of experience. In agreement with previous research findings, the findings of this study showed accumulated Canadian work experience played an important role in immigrant youth's employment earnings by the time of the wave 3 interview. More specifically, immigrant youth who gained more Canadian work experience, had higher hourly wage than their peers who were relatively less experienced in Canada's labour market.

Further Education after Migration

Access to education and the labour market are the most important arenas

in which young adults have to establish themselves as active social actors in society. As the United Nations Department for Economic and Social Affairs (2002) noted:

> Young men and women warrant special attention because jobs provide not only a source of income, but also of dignity and self-respect. Sustained unemployment can make youth vulnerable to social exclusion, as youth who enter the workforce with limited job prospects, underdeveloped skills, and inadequate education are most at risk for long-term unemployment, intermittent spells of unemployment and low wage employment throughout their working lives (http://www.un.org/esa/socdev/poverty/papers/youth_back.pdf).

Pursuing further education after arrival in Canada has been embraced by many new immigrants as a strategy to facilitate their social integration and to improve their labour market performance. Anisef, Sweet, and Adamuti-Trache (2010) contended that for recent immigrants who attended Canadian PSE institutions, it is crucial to enter an environment in which they are not marginalized because of their imperfect language skills and lack of understanding of Canadian culture, and for unemployed immigrants, PSE participation might be the only gateway to eventual integration. Their analysis of LSIC respondents' PSE pathways revealed that a very large number of recent immigrants sought further job-related education or trainings in the form of a community or career college credential.

It was generally noted that, in many countries, public perception is that TVET is second-class education for second-class types of employment. This stigma may discourage students from pursuing such training (Government of Canada, 2012). However, since LSIC was conducted, it is more apparent in Canada that employment levels for TVET students are rising as more youth are choosing this stream (Council of Ministers of Education, Canada, 2007). Although university graduates continue to have better employment rates than TVET graduates, there is anecdotal evidence to suggest that an increasing number of university graduates are returning to college to take TVET programs (Council of Ministers of Education, Canada, 2007).

A large number of newcomers took non-university programs during the initial years of arrival (Anisef, Sweet, & Adanytu-Trache, 2010) to equip themselves to become a more qualified candidate for Canada's labour market. Technical and vocational education and training (TVET) helps learners to acquire skills, knowledge and attitudes needed to enter the world of work in Canada successfully. A quality TVET program plays an essential role in promoting a country's economic growth and contributing to poverty reduction as well as ensuring the social and economical inclusion of marginalized communities (UNESCO, 2010). The majority of the immigrant youth in this study attended TVET programs provided by colleges/CÉGEPs. This study showed that the type of vocational school (college/CÉGEP vs. trade/apprenticeship) had an influence on immigrant youth's average family

annual income, but not on their individual hourly wage after four years of landing. Moreover, trade/apprenticeship graduates were more likely than colleges/CÉGEP graduates to report underemployment.

Immigrant Entry Category and Economic Performance

Immigrants have played, and will continue to play, an important role in the evolution of Canada. In 2011, immigration contributed to over 46% of net labour force growth (Background, 2013). Canada increasingly favors immigration policies based on human capital theory and economic outcomes. Consequently, while immigration is on the increase there is a downward trend in the number of family category entrants admitted to the country (Menjivar 2000); as it is generally presumed that immigrants selected on the basis of human capital will have better economic outcomes than unscreened immigrants. However, there is speculation that social capital, the social networks of immigrants from the family category provide access to employment resources not available to others (Phythian, Walters, & Anisef, 2009). As social or migrant networks refer to the relationships that link migrants, non-migrants, and potential migrants in origin and destination countries, they serve as sources of information on initial settlement, transportation, and housing and labor markets (Menjivar, 2000). The findings reported by Picot, Hou, and Coulombe (2007) indicated that skilled immigrants were more likely to enter at a low income level and be in a chronic low-income state than their family category counterparts. However, that

finding was not supported by this study's findings. This study showed that earning gap did not exist between immigrant youth in economic category and other categories after six months of arrival but economic category immigrant youth outperformed their peers with gaining higher hourly wage after four years of arrival.

Depending upon labour market conditions, Citizenship and Immigration Canada (CIC) wants to use immigration to best support the economy. Research shows that immigrants who had job offers before they arrived in Canada were better placed to contribute to the Canadian economy. Candidates with strong language skills, Canadian work experience, and who arrive in Canada at a younger age (less than 18 years old) do especially well. The new Start-Up Visa launched by CIC is the first of its kind in the world; this new visa aims to attract innovative entrepreneurs to launch their companies in Canada, to create new jobs and spur economic growth (Backgrounder, 2013).

Low-income among Immigrants

Results from this study indicated that immigrant youth's hourly wage after six months of arrival was positively correlated with their hourly wage after four years of landing, and hourly wage was also positively correlated with average family annual income. A report from Statistics Canada (2005b) shows that average hourly wages in 2004 ranged from a high of $18.99 in British Columbia to a low of $15.08 in Prince Edward Island. However, on average, immigrant youth in this study made $14.63 per hour. Moreover, according to

OECD (2013), the average annual wage for employees in Canada was $41,713 in 2001 and $47,311 in 2005. The average annual wage of the immigrant youth in this study was $30,430 (= average hourly wage $14.63 * 40 working hours per week * 52 weeks per year) at their four years of arrival (in 2005) that is only two-thirds of the national average earning. Similar to Picot, Hou, and Coulombe's (2007) findings, this study revealed the low-income dynamics among recent immigrants during their early years in Canada.

Underutilization of Qualifications/Skills

The economic outcomes of immigrants can be addressed using a host of different metrics and time frames. Single indicator such as poverty, earnings, employment or unemployment only captures one aspect of economic well-being. In addition to employing mean earnings in terms of hourly wage and average family annual income, this study also examined qualifications and skills utilization and job satisfaction. The findings of this study indicated that more than one-third of the sample perceived underutilization of qualifications/skills in their jobs after four years of landing which highlighted the existing concerns on overqualification or underemployment with first generation immigrants. In addition, young male immigrants in this study were more likely than females to report perceived underemployment.

Boyd and Cao (2009) indicated that a major reason for high underemployment among immigrants was inadequate language proficiency that prevents them from finding jobs that match their qualifications. However,

this study showed that utilization of qualifications/skills among young immigrant vocational graduates did not vary by official language ability. With respect to visible minority status, immigrant youth of color were more likely than immigrants of non-visible minority to report underutilization. This finding might be explained by human capital theory and discrimination theory.

Overqualification and mental health. Research back to the 1990s (Johnson & Johnson, 1996) already showed there were significant positive relationship between perceived overqualification and psychological well being. More specifically, the greater the perceived overqualification, the greater the psychological distress. Similar to unemployment, underemployment can also contribute to low self-worth, low self-esteem, and the decrease the senses of belonging.

Underemployment and job satisfaction. Existing research findings revealed that overqualification or underemployment was related to several facets of job satisfaction, such as organizational and career commitment (Johnson & Johnson, 2000). This study also revealed that utilization of qualifications and skills were associated with job satisfaction among immigrant youth. Reports on job satisfaction in wave 3 were similar across immigrant categories, and were also similar by gender and between the two types of Canadian vocational school. Although job satisfaction was not significantly related either to visible minority status or to official language ability, visible minority immigrant youth and immigrant youth who did not

speaking fluent English and/or French were less likely to be very satisfied with their jobs after four years of arrival to Canada.

Limitations and Future Studies

This study contributed to research on young immigrant economic integration by casting light on after-migration Canadian post-secondary vocational graduates, but there were limitations. First, the small sub-sample of recent immigration youth completed vocational schools in Canada from the LSIC data limited this study to examine the factors in a broad way. For example, the original LSIC data categorized the Canada's official language ability into five different levels, none, poor, fairly well, well, and very well, but in this study official language ability was coded into two groups as very well and not very well due to the small numbers of respondents who reported language skills in the lower sub-levels. Therefore, future study with a larger sample will be needed to examine immigrant youth with Canadian vocational education. Second, this study focused on a single cohort of immigrant youth who arrived in Canada in 2000-2001, which constrained the generalizability of the findings. Third, the present study focused on employment outcomes of immigrant youth during the first four years in Canada. Research on employment outcomes trajectory over the life course will capture a bigger picture to ascertain how different choices made regarding host country post-secondary schooling affects immigrants' economic integration process. Fourth, relatively sparse information on post-secondary vocational programs was

provided by the LSIC; only the types of vocational schooling were covered in this paper. The length of the vocational program, time for completion, and field of studies may also be factors, and would be beneficial when considered in future research. Finally, future studies may examine the reasons for immigrant youth choosing vocational education over other types of post-secondary education and whether occupations commensurate with their training level and field of study were available to them.

Conclusions

Using the conceptual frameworks of discrimination theory and human capital theory, this study examined the order cohort of immigrant youth aged 19 to 29 at landing and who completed vocational training in Canada during their initial years of arrival. Looking at the immigrant youth's labour market outcomes in terms of their hourly wage, average family annual income, job satisfaction and qualifications/skills utilization, this study concluded that the mean hourly wage rose by four years after arrival as opposed to six months after arrival. This increase is supported by the traditional economic trajectory story among immigrants, where they earn less at entry but catch up after a number of years in Canada (Statistics Canada, 2009). However, their employment earning rates and reports on job satisfaction and qualifications/skills utilization reflected the political and research concerns on low-income and underemployment among recent immigrants in Canada.

This study not only considered post-migration factors, such as vocational

schooling, official language ability and work experience, but also time-constant pre-migration characteristic such as visible minority status and foreign education level. The regression model in this study including all the discrimination and human capital indicators showed the three significant predictors of immigrant youth's average family annual income after four years of arrival are the highest pre-migration education level, the type of Canadian vocational school and the length of Canadian work experience, and the highest pre-migration education level controlled by immigration category and Canadian work experience controlled by gender were found to be the significant predicators of immigrant youth's hourly wage after four years of arrival.

Even although visible minority status did not affect the employment earnings of immigrant youth in this study, young immigrant vocational graduates of color were more likely than immigrant graduates with non-visible minority status to report underuse of their qualifications/skills, and they were less likely to report being very satisfied with their jobs. Congruent with the hypotheses proposed by this study, Canadian work experience as one of the key indicators of host-country specific human capital was positively correlated to hourly wage and average family annual income after four years after arrival, and immigrant youth's employment earnings were found to be associated with job satisfaction and qualifications/skills utilization. More specifically, immigrant youth who were very satisfied with their current jobs tended to

have higher hourly wage and higher average family annual income compared to their counterparts who were either satisfied or dissatisfied with their current jobs. In addition, results from this study revealed an earning gap between economic category immigrants and immigrants in other categories after four years of landing, even though there were no significant differences among their employment earnings after six months of arrival. Furthermore, contrary to the hypotheses, visible minority status and language ability did not have effects on either immigrant youth's hourly wage or their average family annual income, suggesting that these factors are not as relevant to this group as perhaps to other immigrant groups.

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Appendix

Relevant Questions from the LSIC Survey Questionnaire

1. What was the highest level of formal education you attained outside Canada? (wave 1)
2. Including all courses or training you have taken, what is the highest level of formal education you attained in Canada? (wave3)
3. In the last 12 months, how much have you and your family receive from all jobs inside Canada? (wave 3)
4. How satisfied are you with your current job? (wave 3)
5. How many weeks at work since coming to Canada? (wave 3)
6. What is the count of members in your household? (wave 1)
7. What is the count of members in your economic family? (wave 1)
8. What is your gender? (wave 1)
9. Immigration category derived from FOSS (CIC database)
10. In this job, what is your wage or salary before taxes or other deductions? (wave 1 and wave 3)
11. In this job, would you say your qualification and skills are being adequately used or underused?
12. How well can you speak English? (waves 3)
13. How well can you speak French? (waves 3)
14. Visible minority status (wave 1)
15. Gender (wave 1)

16. Immigrant category derived from CIC database (wave 1)

Questionnaire (wave 1):

http://www.statcan.gc.ca/imdb-bmdi/instrument/4422_Q1_V1-eng.pdf

Questionnaire (wave 3):

http://www.statcan.gc.ca/imdb-bmdi/instrument/4422_Q1_V3-eng.pdf