Educational Qualification Without Suitable Employment:

Exploring Immigrant Engineers' Personal Narratives

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Submitted in partial fulfillment

of the requirements for the degree of

Master of Education

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Abstract

This qualitative study investigated the experiences of immigrant professional engineers in Canada, 81% of whom are unable to secure employment in their field despite arriving under the auspices of the Canadian government's skilled workers program. The study sought to identify factors that impede such qualified engineers' opportunities within the Canadian job market. Because global economic competition demands that qualified professionals contribute to technological innovation, Canada must develop transitional programs that acknowledge credentials and prior work experience in order to address the underutilization of these qualified professionals and allow immigrant engineers to gain employment within their field. To this end, the study examined personal narratives of immigrant engineers who have experienced unemployment despite high levels of educational attainment, and circumstances that contribute to immigrant engineers' unemployed status. The paper presents a discussion and recommendations for future research in the area of qualification without suitable employment.

Acknowledgments

I would like to thank all those who contributed in making this paper possible.

With much hard work, patience and dedication we are finally at the end.

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CHAPTER ONE: INTRODUCTION

This qualitative study explored the issue of educational qualification without suitable employment experienced by three immigrant engineers. The study specifically sought to provide insights into the participants' experiences and their inability to find jobs within their field of training. Each year, the Canadian federal government accepts 37% of engineers who migrate to Canada as part of the skilled workers program (Citizenship and Immigration Canada, 2012a). Not all Canadian employers recognize the educational credentials and work experience of many of these internationally trained engineers, and therefore many are unable to gain employment in their field (Girard & Bauder, 2005). Moreover, Bauder (2003a) argues that rigorous certification systems favour individuals with Canadian-based education, training, and experience, which thus creates a disadvantage for immigrants.

Realities of Unemployment for Qualified Professionals

As Guo (2010) points out, "Despite the fact that people in most immigrant-receiving countries are committed to democratic principles such as justice, equality and fairness, they often respond negatively toward efforts aimed at ameliorating the low status of minority groups" (p. 159). Immigrant engineers are not immune to the challenges that exist within Canadian society today. I have therefore examined three immigrant engineers' personal narratives as a way of exploring and addressing obstacles that impede such engineers' ability to secure suitable employment in their career fields.

Basran and Zong's (1998) survey of immigrant professionals from China and India who now reside in British Columbia revealed that many internationally trained, non-white immigrants in professional fields had experienced downward mobility in

Canada. An overwhelming majority of survey respondents attributed their occupational disadvantage to foreign credential devaluation as well as discrimination based on racial origin and colour. Reitz (2001) suggests that the broader issue of immigrant skill utilization includes non-recognition of international credentials by licensing bodies. He further adds that employers play a large role by demanding educational prerequisites and Canadian work experience that new immigrants may not possess.

In addition to revealing the barriers that hinder upward employment mobility among immigrants, it is necessary to understand whether the non-Canadian experiences of the participant professionals are directly correlated to their failed attempts to gain employment within their field. However, it is clear that immigrant professionals by far face a greater challenge than their Canadian-born counterparts when trying to acquire suitable employment (Li, 2001). The devaluation of international educational credentials seems to be an issue for internationally trained professionals by Canadian employers; as Reitz (2001) observed, Canadian employers may be unaware of the true value of immigrant engineers' qualifications.

I chose to study the experiences of immigrant professional engineers partly because they represent a significant portion of—and contribute to—the global economy (Boyd & Thomas, 2001) and, as Jones (2002) suggests, excellence in higher education in the field of science and engineering helps a country to be technologically innovative and economically competitive. I also sought to address the disparity in immigrant professionals' earnings in relation to those of their native-born counterparts. As Guo (2010) has shown, immigrants across all categories, including highly qualified professionals, earn less than native-born individuals among Organisation for Economic

Co-operation and Development (OECD) member countries (with the exception of Australia). This disparity fosters other social justice concerns, including language barriers that create obstacles for immigrants seeking Canadian work experience, which in turn may affect immigrants' quality of life (e.g., by relegating them to low-income housing environments). In short, immigrant engineers face various forms of heightened discrimination that pose a significant and sometimes insurmountable challenge in finding suitable employment.

Purpose of Research

This study focused on the challenges of three qualified immigrant engineers who accepted (or were compelled to accept) jobs well below their level of qualification in order to sustain their families. This ultimately resulted in a deskilling and underutilization of human capital. The study examined the inner landscapes of the Canadian job market and how qualified professional engineers with seemingly adequate educational credentials are unable to find employment in Canada. As noted earlier, many employers seek candidates who possess some Canadian experience, yet as Guo (2010) notes, immigrants at times are deprived of opportunities to gain work experience due to obstacles that block access to the labour market, despite the fact that they bring significant human capital resources to the host countries.

Canada is known internationally for its multiculturalism and has the highest level of immigration per capita of any country, averaging about 250,000 immigrants per year (Chapin, 2012). Nonetheless, members of the educated immigrant population find it difficult to secure suitable employment within their field, which indicates a need for more

effective processes to assist immigrants educated in another country to gain meaningful employment in Canada.

Rationale

The field of engineering is significant to me because of my 19 years of experience working with engineering professionals in the aerospace industry as a production planner (currently Operations Planning Manager). I have also been privileged to work alongside such individuals as colleagues, and have forged friendships with some of them. Within the manufacturing and design environment in which I work, I have had several interactions with engineering professionals who hold postgraduate degrees. Approximately 70% of these degree holders are internationally trained engineers who returned to school in Canada in an attempt to increase their chances for employment within their field. During our workplace discussions, these engineers have shared with me stories of the challenges they faced in trying to find jobs within their field.

In addition to my interactions with colleagues, I also discovered that an inordinately large majority of job applicants over the years who have applied for postings for assemblers and junior technicians within the firm's manufacturing departments held engineering degrees from international educational institutions. While assessing these potential candidates, it became clear to me that there could be a systemic problem that would cause highly qualified individuals to apply for entry-level jobs that offered remuneration slightly above the minimum wage level. During the selection process, and when the opportunity presented itself, I often asked candidates why they had not applied for jobs that were better suited to their educational qualifications. The candidates' replies often cited two common reasons: (a) they often were not called in for an interview after

applying for engineering positions, and (b) most employers indicated that they were looking for engineers with Canadian experience. Others believed that their sociolinguistic accents distracted and discouraged employers during the interview and hiring process, which in turn brings to light the issue of social justice.

The social justice undertones of my study are best highlighted through stories told by one of my colleagues as well as by the narrative of an engineer of African-Canadian descent who was recruited by an employment agency and scheduled for an interview. The company looked after the candidate's air and ground transportation as well as hotel accommodations prior to the interview. On the scheduled interview date, a receptionist greeted the candidate and asked him to wait in a room in which the interview would be conducted. After waiting a half-hour, and much to his surprise, the candidate was informed that a mistake had been made and that the interview had been cancelled. The candidate was convinced that the interview was cancelled because the employer had not anticipated that the applicant was a person of colour based on the reactions of individuals he saw upon entering the premises. Stories such as this have encouraged me to further investigate the disparity between educational qualifications and suitable employment.

Li (2001) identified several barriers for employment and social mobility for immigrants, especially those from non-European countries. Such barriers included credential recognition and employment discrimination against immigrants with identifiable linguistic and racial features. But as noted previously, I maintain that all individuals should be treated fairly regardless of their race, ethnicity, gender, sexual orientation, or disability. The standard for employment should be based primarily on

candidates' skills and experience and whether they meet the educational qualification requirement as mandated by the position.

Several internationally trained engineers currently are employed in laborious and relatively low-paying assembly positions at the company in which I work. Most have given up on the prospects of ever practicing their profession and claim the need to remain employed as a means of sustaining their families overrules the possibility of returning to school for Canadian educational qualification as doing so would create financial hardships. They also believe their chances of securing employment within their field are unlikely without some Canadian experience as they are often overlooked during the application process for engineering positions. Most of these engineers had been part of the Federal Skilled Workers Program and felt very strongly about the prospect of immigrating to Canada as they had acquired enough points to be successful applicants under the requirements of the program.

I sought to determine if social barriers such as marginalization and exclusion are leading factors that prevent immigrant engineers from gaining access to the engineering job market. If the structure of the immigration policy is aimed at getting qualified professionals within various fields, it remains unclear why these immigrant professional engineers are still unable to secure jobs within their respective fields. According to Duffy (2003), the number of Canadian immigrants with university degrees from other countries more than doubles that of the general population. However, the federal government has difficulty integrating them into the economy because of a lack of recognition of their credentials, a higher language threshold, and the lack of Canadian experience. Duffy further indicates that although Canada has successfully structured its immigration system

to draw the best and brightest from other countries, it seems willing to squander such talent. With this in mind, one may wonder what can be done to bring about greater integration of these engineering professionals within the Canadian economy.

Another reason for studying the experiences of immigrant professionals in the field of engineering is that they account for a large portion of the global economy. Skilled immigrants, especially those in the field of engineering and technology, contribute significantly to the U.S economic growth and global competiveness (Wadhwa, Saxenian, Rissing & Gereffi, 2008). Additionally, Orrenius and Zavodny (2013) found that immigrants accounted for about 51% of the growth in the labour force between 1996 and 2011. Jones (2002) suggests that excellence in higher education in the field of science and engineering helps a country to be technologically innovative and economically competitive. Canada has taken the first step in ensuring that the country is economically competitive by opening its door to international professionals from a myriad of fields.

The advancement of technological innovation within the field of engineering is essential within the broader market of technology. Therefore, Canada needs to attract the most qualified candidates within this field to foster the country's economic growth and prosperity. According to Wall (2010):

> Engineers are responsible for technological development that has created our modern society; they have built infrastructure, industrial production, mechanized agriculture, modern transportation systems, and technological innovations such as mass media, computers and communication systems. Technological innovations have created wealth, facilitated our life and provided comfort. (p. 7)

Boyd and Thomas (2001) argue that engineering-based services are profitably exported, and high-technology sectors with extensive global linkages employ engineers. The United States and Canada are among the leading countries on a global scale that export engineering services. As a result there is current and sustained interest in engineering-based services and in the employment of engineers.

Employing qualified skilled engineers who migrate to Canada may capitalize on this critical skill component. However, although the opportunity is given to skilled professionals to migrate to Canada based on their professional experiences and educational qualifications, immigrant engineers have difficulty finding jobs within their field in the Canadian job market, which leads to an excess of qualified people without suitable employment in the field of engineering. Many skilled immigrants arrive with impressive resumés, only to learn that their foreign credentials are not recognized by Canadian employers (Chapin, 2012). This lack of recognition is disconcerting for new immigrants, as some of them held high-status jobs within their countries prior to immigrating to Canada. As Reitz (2001) notes,

> If Canadian employers discount foreign education, as they apparently do, then the
> issue remains whether this discounting is justified based on less actual relevance,
> or whether it occurs because Canadian employers are unaware of the true value of
> such foreign qualification. Immigrants with Canadian education receive higher
> returns to education than immigrants with foreign education. (p. 21)

Ultimately, my research will seek to address the apparent discrepancy with the valuing of immigrants' credentials and how it affects those in the engineering profession.

Methodology

This major research paper employed a narrative research design. I conducted

personal interviews with three individuals whom I sought out within the field of

engineering in an effort to identify the challenges they faced in their search for suitable

employment as newcomers to Canada. Creswell (2012a) asserts that when people tell

stories they feel listened to, and their information brings researchers closer to the actual

practise of education: "Thus, stories reported in qualitative narrative research enrich the

lives of both the researcher and the participant" (p. 501). I collected information from

these individuals through the process of narrative interviewing and asked them open-

ended questions as a means of allowing them to share some of their personal experiences.

When considering the use of narrative inquiry in understanding the experiences of

individuals, one can see that:

> narrative inquiry is a deliberative research process founded on a set of
>
> ontological, epistemological, and methodological assumptions that are at play
>
> from the first narrative imaginings, through to the representation by asking
>
> questions as well as retelling, reliving, and inquiring into stories of the lives of
>
> individuals. (Clandinin, Pushor, & Orr, 2007, p. 33)

By utilizing narrative research, I explored the stories of these professionals and came to

know firsthand from these individuals their individual experiences and challenges.

Clandinin and Connelly (2004) and Van Manen (1990) maintain that narratives are a way

for people to make meaning from their lives, and thus, these immigrant professionals'

stories shed light the challenges they face when seeking employment within the Canadian

job market. This approach also highlights how each experience influences the decisions

we make today and how those decisions affect our lives through lived experiences. Van Manen describes lived experience as

> the starting point and the end point of phenomenological research: it transforms lived experiences into a textual expression of essence—in such a way that the effect of the text is at once a reflexive re-living and reflective appropriation of something meaningful: a notion by which a reader is powerfully animated in his or her own lived experience. (1990, p. 36)

Through listening to the experiences of immigrant professionals, one can begin to understand the changes that are required to help them gain employment within their specialized field of training.

In narrative research designs, researchers describe the lives of individuals, collect and tell stories about people's lives, and write narratives of individual experiences (Connelly & Clandinin, 1990). While narrative research in itself will not change the employment outcome for these internationally trained professionals, my hope is that the telling of stories through narrative will result in a better understanding of some of the challenges these individuals face during integration into Canadian society and while searching for suitable employment in their respective fields. The study also adds to the existing literature in that it may ultimately improve employment practices, especially as it relates to new immigrants. This study provided a deeper understanding of the immigrant experiences in relation to credential recognition and finding suitable employment.

Theoretical Framework

A main theoretical backdrop for the research is Bauder's (2003a, 2003b) work on marginalization and exclusion. I compiled and reviewed academic literature that explores

personal narratives which in turn reveal the experiences of those who cannot find work as a result of their credentials not being recognized, as well as the underlying social factors that contribute to such exclusionary practices. Another key source of information is derived from Guo's (2010) work on minority rights, learning, and inclusive citizenship, including census data that show 67% of recent immigrants continue to experience lower employment rates and higher unemployment rates than their Canadian-born counterparts, along with an earning gap between recent immigrants and Canadian-born professionals that has widened significantly over the past century (Statistics Canada, 2008b).

Immigrant engineering professionals are often marginalized and excluded from the Canadian job market by employers and regulatory bodies that govern the field of engineering. The theoretical framework for this research can be explained through social exclusion theory—recognizing the existence of power that disseminates inequalities based on race, class, gender, sexual orientation, language, and other social divisions at all levels of society, including the social, economic, and political spheres. This form of social exclusion is termed marginalization and can also be viewed as the "systemic denial of entitlements to resources and services and the right to participate on equal terms in social relationships in economic, social, cultural, or political arenas" (Governance and Social Development Resource Centre, 2014, p. 9). Within the social exclusion framework, one can recognize social identities that are constructed to both legitimize and justify inequalities. Lämsä (2012) suggests that the terms "marginalization and social exclusion describe the sociological but proportionally traceable phenomena of social life" (p. 2). She further suggests that marginalization, generally speaking, is the "weakening of

the ligature between the individual and society and that social exclusion is the utmost

form of marginalization" (p. 4). Additionally, Hall (1999) defines marginalization as:

> the peripheralization of individuals and groups from a dominant, central majority.
>
> … A sociopolitical process, producing both vulnerabilities (risks) and strengths
>
> (resilience), … generalized from political struggles of women, people of color, the
>
> poor, immigrants, the mentally ill, sexual minorities, children, and victims of
>
> violence. Marginalization is thus inclusive oppression, but it is also a consequence
>
> of oppression. (p. 90)

The act of marginalization seeks to exclude people from certain groups (Lämsä,

2012). Individuals who hold power, as in the case of regulatory bodies that exclude

certain professionals from attaining accreditation due to stringent policies, are often

responsible for such marginalization. The practices of employers looking for engineers

with Canadian experience are another example of marginalization. The social exclusion

framework provides a greater understanding of how marginalization affects immigrant

professionals when they migrate to and are conferred permanent resident status in Canada

under the Points System (see Appendix A) for skills and experience.

Immigrants are willing to bear the costs of moving to a new and unfamiliar

country in pursuit of economic opportunities and a better standard of living in order to

create a brighter future for their children (Anisef, Brown, Phythian, Sweet, & Walters,

2010). Immigrant professionals who subscribe to this belief are dismayed upon realizing

that they are unable to find work in their respective fields after bearing the costs of

relocation and uprooting their families (Anisef et al., 2010). Additionally, after facing the

reality that their previous experiences and education is not applicable to their new

country of choice due to the rigorous nature of the credentialing system, immigrant professionals turn to non-credentialed and often substandard employment that places them essentially into positions of long-term servitude in order to survive and to provide for their families (Reitz, 2001).

To summarize, immigrant professionals face social exclusion and are at a disadvantage in their pursuit of integration and assimilation into the wider work force for which they are qualified. Through their stories, I seek to give voice to the qualified immigrant engineers who are unable to secure employment within their field of training by looking at the practices that exclude them from the professional ranks of the Canadian workforce. By using a social exclusion framework along with participants' narratives, this study seeks to deconstruct inequitable power structures that affect immigrant professionals' prosperity and well-being.

Situating the Theorists in the Research

Bauder (2006) notes that immigrant workers contribute to the development of a country's economic and cultural capital. However, he notes also that immigrants are routinely discriminated against as mere labourers who often occupy jobs requiring skills well below their qualification level. Bauder specifically identifies such occurrences as a type of exclusion and marginalization among the immigrant community. Immigrant workers who hold professional degrees and qualifications or specialist skills apply via the Skilled Workers Program, and most times bring along their spouses and children in the hopes of enhancing their lifestyles. However, when they are granted permanent residence status upon arrival in Canada, the search for suitable employment in their field of training swiftly becomes an impasse.

Importantly, Bauder's theory of exclusion and marginalization highlights the inefficacies within the Canadian multiculturalism policy framework (Girard & Bauder, 2007). The Multicultural Policy Framework states that all Canadians are guaranteed equality before the law and equality of opportunity regardless of their origins, and recognizes Canada's diversity by race, cultural heritage, ethnicity, religion, ancestry and place of origin, and equal access to work (Citizenship and Immigration Canada, 2012). This theory illustrates that the very nature of the Canadian immigration policies might be contradicted by the mandate of the multicultural policy of ensuring immigrant professionals are effectively transitioned into the marketplace as newcomers to Canada. Bauder's works specifically addresses such policies, illustrating that the immigrant engineers' quest for acquiring suitable employment within their field of training is a daunting experience.

In utilizing Guo's work, I position my research in the area of marginalization and exclusion to illustrate some of the systemic or non-systemic social issues that may plague engineering professionals in their pursuit of employment as it directly relates to their class status and their acquired social networks. Some of Guo's work focuses on citizenship and immigration as well as ethnic relations, social justice, and equity in education. Guo has expertise in the area of transnational migration, work, and lifelong learning (Canadian Ethnic Studies Association, 2013). In situating Guo as a theorist in this research, I incorporate his theories when assessing barriers that immigrant professionals face in assimilating and integrating into the broader Canadian society. Although Guo's work focuses primarily on Chinese immigrants in Canada, there is a

direct link to the issue of educational qualification without suitable employment among a broader range of professionals in all fields who are qualified yet unable to find work.

According to Couton (2002), 39% of immigrants who arrived in Canada in 2000 from Asia sought to work in engineering. This demonstrates that Chinese immigrants occupy a significant portion of those in the field of engineering but are unable to find work. Guo (2010) emphasizes that one of the main barriers for immigrants is the non-recognition or devaluation of their foreign credentials and that professional associations and regulatory bodies act as gatekeepers that create an added challenge for immigrants.

Ultimately, I adapted and made use of Bauder's and Guo's theories to situate my study within a narrative research framework that sheds light on the issue of educational qualification without suitable employment for immigrant engineers within the Canadian landscape.

Outline of the Remainder of the Document

Chapter 2 reviews related literature about immigrant experiences, with a specific focus on qualified engineering professionals, especially those from racialized populations. Chapter 3 describes the study's methodology with respect to the use of narrative research and the application of the marginalization and exclusion frame to situate this research. Storytelling is a framework that is also influential in this study. It situates the lives of the participants and deepens the understanding of the context by which immigrant professionals navigate their way through the Canadian job market to find suitable employment in their field of training. Data collection involved individual semi-structured interviews that asked participants open-ended questions related to their experience to find work. Chapter 4 analyzes the narratives and stories of the participating

immigrants' experiences in the Canadian job market. Finally, chapter 5 summarizes the research findings and discusses themes that emerged from the research as well as some concluding thoughts about the immigration system and recommendations for Canadian employers and regulatory bodies.

CHAPTER TWO: LITERATURE REVIEW

This literature review explores the following topics: the Canadian Immigration system for Skilled Labour (Points System); the Professional Engineers of Ontario (PEO) regulatory body that governs engineers; the workplace learning environment, focusing on capabilities; the effects of marginalization and exclusion on the success of immigrants; and the limitations of current research. My in-depth analysis of these areas sheds light on the lived experiences of new immigrants to Canada.

The Employment Standards Act (2000) states that employment equity encourages the establishment of working conditions that are free of barriers, corrects the conditions of disadvantage in employment, and promotes the principle that employment equity requires special measures and the accommodation of differences for the four designated groups in Canada. These groups were identified as women, Aboriginal peoples, persons with disability, and members of visible minority groups. Boyd and Thomas (2001) examined the labour market success of immigrant engineers in Canada and concluded that foreign-trained engineers are more likely to be unemployed; and if they are employed they are less likely than Canadian-trained engineers to be working in managerial, technical, or engineering roles. As a result, immigrant engineers are often left with no choice but to accept jobs outside of their field of training and often resort to lower-paying jobs to sustain their families. The policies of regulatory bodies such as the PEO that recognize qualified engineers' international credentials are marred by structural and institutional barriers that impede the ability of these professional immigrants to fully succeed in the Canadian job market (Ostapchenko, 2013).

According to Freire (1974), oppressed people can change their destiny only when they are able to speak in their own voice and express their own truth without others mediating and interpreting on their behalf. Some of these barriers include policies and procedures of professional and regulatory bodies. This inadvertently limits those who would pass qualification exams set out by these organizations but still would require one year of Canadian work experience to complete their certification. Girard and Bauder (2005) explain that according to the PEO, the year of Canadian work experience aims to provide applicants with both the technical and non-technical knowledge that is required to effectively practice professional engineering. Admittedly, the challenge for these internationally trained engineers is the ability for employers to hire them so that they can gain this Canadian work experience.

Canadian Immigration System for Skilled Workers

The driving force behind immigration includes social, political, economic, and demographic factors (Guo, 2013). Guo (2013) argues that from the Confederation of Canada in 1867 until the 1960s, the selection of immigrants was based on their racial background, and that British and Western Europeans were the most desirable citizens while Asians and Africans were the least desirable. Canadian immigration policy, even in its early stages, was afflicted with marginalization and the exclusion of certain individuals. Though there have been several changes to this historically racist immigration policy, the stigma from its inception still leaves its mark in today's system.

In 1971, the federal government helmed by Prime Minister Pierre Elliot Trudeau declared that Canada would adopt a multicultural policy. This act became effective in 1988, which made Canada the first country in the world to adopt an official

multiculturalism policy (Canada Multiculturalism Act, 1985). The Canadian

Multiculturalism Act was proclaimed, and defined multiculturalism as "a policy of

inclusion that aims to help people overcome barriers related to race, ethnicity and cultural

or religious background" (Department of Canadian Heritage, 2005, p. 3). There are

several ways in which immigrants are admitted to Canada: the family class, economic

class, and the refugee class. The economic class is comprised of the skilled workers or

business immigrants (Guo, 2013).

According to the Government of Canada's Federal Skilled Workers Program

website, skilled workers are chosen as permanent residents based on their education,

work experience, and knowledge of English and/or French, and they must also score

sufficient points under the skilled worker point grid, possess suitable settlement funding,

and undergo a successful security background check and medical examination

(Citizenship and Immigration Canada, 2012a). The program was launched primarily to

address the labour shortage as a means of economic development.

Girard and Bauder (2007) note that in recent decades, the government has aimed

to capitalize on the increasing international mobility of the labour force by admitting

thousands of skilled immigrants to support the growth of the Canadian economy and to

remain competitive in the international markets. Guo (2013) adds that Canada accepted

more immigrants from developing as compared to developed countries and that the

largest number of these immigrants arrived from Asia, followed by the Caribbean, Latin

America, and Africa. Owing to the fact that Canadian immigration policy focused on a

system of attracting immigrants who were considered more economically viable to the

growth of the country, one might question the use of these skilled professionals within

their respective fields. In order to achieve a skilled worker status, one must possess postsecondary qualifications with some extensive work experience within a particular field of specialization. Several immigrant engineers have documented that foreign educational credentials and qualifications are often devalued in Canada, sometimes denying immigrants the opportunity to practice their occupation in their field of training (Basran & Zong, 1998; Li, 2011; Mata, 1999; Najm, 2001). It is clear that the immigration system under this classification of worker is aimed at luring the most intellectual minds as immigrants into the Canadian economy. With that said, the challenges still resonate in getting their credentials fully recognized within the Canadian system.

In 2006, Canada accepted over 250,000 immigrants and the majority of these immigrants were classified as economic immigrants. This group includes skilled immigrants who were accepted to Canada on the basis of their professional and educational backgrounds through the Point System (Citizen and Immigration Canada, 2008b). The Point System which assesses the educational qualification of applicants under the Federal Skilled Workers program uses six selection factors in assessing whether an individual qualifies to immigrate to Canada as a federal skilled worker. Upon the successful attainment of 67 points (see Appendix A) the applicant will be accepted as a Federal Skilled Worker (Citizen and Immigration Canada, 2012b). Furthermore, the report revealed that one in five (19.8%) of the total Canadian population were foreign-born. This increase in foreign-born nationals within the Canadian economy presumably gives rise to the rising trend of multiculturalism and the need to quickly identify ways in which the skills and experiences of skilled immigrant professionals may effectively

contribute to their respective industries. Despite the efforts by government and service sectors, immigrants continue to face difficulties in the settlement process, particularly in accessing employment (Man, 2004: Reitz, 2005).

Skilled immigrants coming through the Points System accounted for more than 50% of all immigrants to Canada (Citizenship and Immigration Canada, 2012b), and most of the recent immigrants are likely to be trained scientists and engineers (Couton, 2002). In 2001, 44% of skilled immigrants identified an intended occupation at the time of migrating to Canada, 63% of whom indicated engineering (Shan & Guo, 2013). Despite their professional background, recent immigrant cohorts find it extremely challenging to enter their fields of practice, and "many of them end up with jobs far from commensurate with their previous educational backgrounds" (Shan & Guo, 2013, p. 30). The structure of the immigration policy in dealing with skilled workers is such that it aims to move Canada further ahead on the world stage as a nation that embraces multiculturalism and that continues to advance economically as Canadian birthrates are falling.

Foreign-trained professionals continue to face the uphill battle of finding employment that aligns with their area of expertise. Shan and Guo (2013) also state that the labour market outcome for immigrant engineers exemplifies the experience of the skilled immigrants in general. Boyd (1990) and Boyd and Thomas (2001) found that, despite their higher international educational levels, trained engineers are less likely to be hired in their professions than their counterparts educated in Canada. Another challenge for these immigrant engineers is that even if they are hired for a job, they are

underrepresented in managerial and engineering positions, some often taking positions such as junior technicians to get a start within the Canadian job market (Tang, 2000).

Regulatory Body Governing the Field of Engineering

The PEO is the professional association that regulates the practice of engineering in Ontario. This organization has been in existence for more than 90 years and it is the largest provincial engineering regulatory body in Canada with more than 80,000 fully licensed members (PEO, 2013). One can obtain a P.Eng designation which represents the highest standard of engineering knowledge, experience, and professionalism as outlined on the PEO website. In order to become a professional engineer, one must be licensed by the PEO.

Immigrant engineers must have their educational qualifications recognized by the Canadian government, even though in most cases many of these professionals have already acquired an extensive amount of experience that should allow them to practice in Canada. Girard and Bauder (2005) note that foreign-trained engineers represent the single largest group of immigrant professionals awaiting licensure. The Professional Engineers Act gives the PEO the power to develop and enforce regulations for admission to the profession (such as instituting certain academic training and work experience requisites) and standards of professionalism engineering practice (Girard & Bauder, 2005). Girard and Bauder also remark that foreign-trained engineer applicants are dealt with differently than Canadian-trained applicants.

All applicants, both immigrant and Canadian-born, must hold acceptable academic credentials to be considered for licensure (Girard & Bauder, 2005). Nevertheless, the credentials of graduates of accredited Canadian engineering schools

automatically meet the licensing academic requirements. However it must be noted that at times there may be good reasons not to accredit someone with an engineering degree from certain countries. For example, instances of academic fraud at bogus institutions, diploma mills, and accreditation mills present a threat to the integrity of accreditation. That said, it is apparent that Canada has a two-tier system where the same rules do not apply to all. From Bauder's (2003b) perspective, this kind of system can immediately be seen as a system that marginalizes and excludes engineers who were not educated in a Canadian accredited university. It is a concern that the educational attainments of immigrant engineers were sufficient to get them to Canada but not enough to satisfy and be recognized by the PEO. These policies need to be reconsidered in order to facilitate an easier transition of admitted immigrant engineers to Canada so they may find suitable employment in their field of training.

Friesen (2011) suggests that provincial engineering regulators provide licensing pathways for immigrant engineers often in the form of an assigned set of confirmatory exams to confirm eligibility for licensure. After successful completion of a technical exam and a professional ethics exam, foreign-trained engineers must prove that they have 4 years of work experience, including 1 year of Canadian work experience, and provide references from Canadian professional engineers (Boyd & Schellenberg, 2007). The greatest challenge for most foreign-trained engineers is acquiring the year of Canadian work experience stipulated by the PEO, and they often struggle to find employment in the field in order for them to complete their certification.

Bauder (2003b) argues that foreign-educated engineers, who cannot be immediately certified, are subordinated to Canadian-educated engineers for whom

certification is easier. Interestingly, internationally educated engineers are a little more mature than other engineers—almost 3 years older than their Canadian born counterparts (Boyd & Schellenberg, 2007), and such age difference is significant as it may indicate maturity and a greater sense of presumed responsibility. Girard and Bauder (2005) found that credential recognition may not be the major obstacle to licensure; instead, social barriers to licensure are greater in terms of meeting Canadian work experience requirements. Canadian work experience posed the biggest obstacle for these foreign-trained professionals as most Canadian employers seek candidates who possess Canadian work experience. In this scenario, foreign-trained engineers are left with few options and often take jobs below their level of educational qualification. The P.Eng license is a way in which immigrants may overcome some of the labour market hurdles that they face (Girard & Bauder, 2007). Girard and Bauder's (2007) research further shows that licensure is one way that immigrants can "Canadianize" their credentials. By doing this, they would have a better chance of finding jobs within their field.

Workplace Learning Environment for Immigrant Professionals

A lack of Canadian experience continues to be a barrier for immigrant engineers to find suitable employment. In defining this Canadian experience, Sakamoto, Chin, and Young (2010) suggest that many skilled immigrant newcomers to Canada believe that "Canadian experience" means having work experience in Canada: "They do not understand how they can be asked to possess this when they have just arrived" (p. 147). There is a slight difference between what is termed the "Canadian experience" and Canadian work experience. Sakamoto et al. argue that the same job-seeking skilled immigrants come to realize that the Canadian experience means a "worldview" into

which they have to be socialized, as opposed to a textbook to be memorized. On the contrary, the Canadian work experience deals directly with acquiring practical work experience within the field of training in Canada, as is evidenced by the certification of the professional engineers as outlined in the PEO.

In the context of the workplace learning environment for the immigrant workers, one can see that several experiences can be achieved when individuals have the ability to work in their particular field of study. To appropriately contribute effectively to their professions, the workplace learning environment, whether formally or informally, must help each worker gain the necessary skills and requirements that are consistent with the Canadian workplace. By doing so, immigrant professionals will assimilate in the context of their educational qualifications, thereby broadening the spectrum for gainful employment. Some argue that the Canadian work experience may be a means of exploiting immigrant professionals (Sakamoto et al., 2010). However, an administrator from an immigrant service agency suggests that the Canadian experience may in part refer to having the appropriate technical skills, but primarily refers to immigrants' competency in performing their jobs (Girard & Smith, 2013).

Several aspects of workplace learning can be explored to understand the nature of work that can help immigrant engineers acquire the necessary expertise toward gaining the Canadian experience; however, I will focus on capabilities. Eraut and Hirsh (2010) note that the capabilities of an individual in the broadest terms include the personal attributes, skills, knowledge, experience, and understanding in the workplace learning environment. Additionally, Spencer (2002) suggests that "workplace or work related learning is often seen an essential part of 'capturing' employee subjectivity in achieving

corporate objectives" (p. 299). Learning can occur anywhere and often can be unstructured. However, the workplace learning environment must create an opportunity for individuals to acquire some form of skill and knowledge that will allow them to improve their interaction at work. Sakamoto et al. (2010) found that the Canadian experience may encompass the acquisition of both hard and soft skills pertaining to particular jobs, some of which may be more difficult to articulate and may include an understanding of Canadian workplace culture and the communication skills necessary to operate effectively within it.

Some seasoned immigrants indicated that acquiring Canadian experience through paid work, volunteer experiences, mentoring, internships, and/or co-op programs was very helpful in eventually obtaining professional jobs (Sakamoto et al., 2010). Spencer (2010) also asserts that on some occasions workplace learning can be beneficial to the employer by creating a more skilled and efficient working environment as workers become more valuable human resources. Within this context, Garavan and McGuire (2001) posit that to develop competencies that will enable employees to respond quickly and flexibly to business needs, organizations are increasingly implementing sophisticated human resource development and workplace learning strategies. This process will facilitate individuals' ability to demonstrate their capabilities within the context of workplace learning.

The workplace learning environment provides a balance between both the hard and soft communication skills, which can be attained through formal and informal learning. Boud and Hagar (2012) suggest that learning is directly implicated in practice and that learning can be represented as participating in practice. Put simply, learning that

is derived from the practical application of everyday work will only serve to broaden the knowledge base of the worker. "Nothing influences learning more powerfully and unconsciously than the everyday circumstances of work itself" (Boud & Hager, 2011, p. 24).

It is within the context of educational qualification without suitable employment that one can see where workplace learning will be essential as a step forward in integrating engineering immigrant professionals. Fenwick's (2013) study examined Canadian educators who address individuals' access to learning opportunities within the workplace, and was primarily focused on vulnerable workers. Such workers include immigrant professionals and immigrants in general, who rely on workplace learning environments as a means of integration into the Canadian employment marketplace.

In contrast to workplace learning, one can gain "lifelong learning" through repeated adaptation and continuous exposure to various situations within the working environment. Delors (1996 and 2013) when characterizing lifelong learning opines that: lifelong learning may be broadly defined as learning that is pursued throughout life: learning that is flexible, diverse and available at different times in different places. Lifelong learning crosses sector, promoting learning beyond traditional schooling and throughout life. (Fenwick, 2013, p. 230)

This concept of "lifelong learning" is essential as it would promote continuous learning and equip individuals for different types of work that is needed, including innovation and adaptation of learning to future work environments. Moreover, Fenwick (2003) suggests that learning through work is an important dimension of lifelong learning. This is particularly so because the ability to learn through formal or informal

work environments will allow individuals to gain knowledge and expertise that will propel them forward for lifelong learning. It is believed that during workplace learning, immigrant professionals will be able to acquire the knowledge and skills that will help them to gain the so-called Canadian experience that some employers regard so highly. Essentially, workplace learning is inextricably linked to lifelong learning. In the context of workplace learning, key skills are utilized to ensure that the cycle of learning never stops and that individuals are able to acquire new skills and experiences as they make themselves better employees (Delors, 2013).

One of the challenges that Guo (2010) associates with lifelong learning is the devaluation and denigration of immigrants' prior learning and work place experience. He suggests that Canada may be missing on some key skill components that are necessary for mobilization of certain professions by not recognizing the prior learning of these immigrant professionals. To fully utilize the skills that immigrants have acquired outside of Canada, they must be provided an opportunity to demonstrate their skills and ability in some context within the working environment that is consistent with prior work experiences. Wagner and Childs (2006) observe that "immigrant optometrists become taxi drivers; social workers become hospital cleaners, teachers become clerical assistants and environmental engineers stack supermarket shelves" (p. 161). This is a waste of human capital, as the skills and experiences of these individuals are not utilized in the most efficient manner according to their educational qualifications.

Although some immigrants have no choice but to take jobs below their skill level, the same could be said for many Canadians who are facing the same challenges. These challenges may include societal considerations such as over-credentialization and

underemployment. However, one can argue that the immigrants' burden of integration without prior Canadian experience is far greater. It is clear that the lack of access to professional occupations for which immigrant professionals has prior learning and work experience leads to unemployment and underemployment, which in turn results in poor economic performance and downward social mobility (Guo, 2010).

Creese and Wiebe (2012) highlight another challenge that immigrants face in seeking employment within their field of training; oftentimes, settlement agencies help channel immigrants into low-wage work, and "the very discourse of survival employment can be traced to settlement counselors urging immigrants to take any job they can find" (p. 59). By doing this, these immigrant professionals will have a greater challenge moving into the desired workplace within their professions. In assessing workplace learning, immigrant professionals need to reposition their thinking in order to succeed within the Canadian marketplace. Despite their work experience and educational qualifications from their country of origin, immigrants who migrate to Canada may never be given the opportunity to practice their field of specialization in Canada. Shan (2009) notes that in the process of career repositioning, immigrants' perceptions of self and performances significantly informed their employment strategies and practices. It is unfortunate that some of these highly qualified immigrants failed to realize occupational and economic achievements due to the lack of opportunity available to them in the working environment. Many of them face multifaceted barriers while attempting to transition into work and learning situations in Canada (Guo, 2010).

As Spencer (2002) reports, pedagogues believe the workplace learning environment is ideal for adult education. Adult education can be linked to workplace

learning as employers formulate learning methodologies that are consistent with facilitating a deeper dimension of skills and knowledge transfer within the working environment. The workplace learning experience will prove to be the best teacher for individuals who are seeking to acquire the Canadian work experience. Following the notion that "experience is the best teacher," Beckett and Hagar (2000) suggest the time has come for experience—that great "given" of adult learning theory and practice—to show what it is made of, particularly because workers find they are taught it in the very conduct of their daily work. Spencer further notes that the workplace learning environment is contingent on those who are within the level of the organization and their ability to recognize that there is needed pressure to make changes that are consistent within the academic level of acceptance. Immigrant engineers will gain new insights within the workplace learning environment from the standpoint of adult education that should align with their previous knowledge and experience which can be applied within the broader workplace spectrum as a transitional phase.

Within the framework of workplace learning and the creation of workplace learning environments for skilled immigrants, one can see that barriers still impede a smooth transition. Experiential learning as a means of acquiring Canadian work experience still evades the immigrant professional—particularly for those in the field of engineering where regulatory requirements of 1 year of Canadian work experience is paramount to licensure, which continues to be an obstacle for the immigrant engineer. With the acceptance of "survival jobs" as a means of providing for their families, the workplace learning within their respective field will continue to elude these engineering

professionals, who must seek other alternatives in order to gain educational qualifications and work experience necessary to practise in their specialized field of training.

Marginalization and Exclusion of Immigrant Professionals

In the context of marginalization and exclusion, Girard and Bauder (2005) state that the social practices of regulatory bodies and of other labour market institutions have the effect of excluding many internationally educated immigrants from their former occupations, forcing immigrant workers into low-wage, unstable, so-called survival jobs. Additionally, Bauder (2003b) suggests that "perceptions of cultural differences between Canadian-born and immigrant workers can typecast immigrants into certain occupations" (p. 416). Girard and Bauder (2005) also note that "Canadian-educated engineers enjoy relatively expedient access to licensing while internationally-educated applicants struggle to fit their 'square peg' qualifications into the 'round holes' of the regulation system" (p. 4). Within the engineering labour market, Canadian credentials would be greater in value than the foreign credentials. This is based on the fact that Canadian employers tend to prefer and typically select Canadian-trained applicants (Girard & Bauder, 2005). This, in itself, is a practice of exclusion which prevents the upward mobility of professionals who left the countries where they were educated with the hopes of continuing in their field of training in Canada. Immigrants have failed to benefit from their educational qualifications and have lower returns on education than their Canadian-born counterparts (Reitz, 2001)

Bauder (2003a) argues that the constant non-recognition of foreign credentials amounts to systemic exclusion of immigrant professionals from the upper segments of the labour market. He further states that the regulation of educational and professional

credentials excludes many skilled foreign-trained immigrants from high-status occupations in Canada while giving domestic-educated workers easier access to these occupations. By continually excluding immigrant professionals from these occupations where they had received formal training in their native countries, one can say that this leads to marginalizing them within the Canadian workplace.

International mobility agreements have been negotiated between Canada and other foreign countries such as United States of America, United Kingdom, France, New Zealand, and Australia among others to recognize the equivalency of the accreditation of these international countries. The majority of international engineer graduates who originate from countries in which these mobility agreements are in place are recognized (Girard & Bauder, 2005). However, immigrants arriving from countries where such mobility agreements are not in place (such as China, India, and some Caribbean nations amongst others) must face the tremendous challenge of getting their credentials validated by professional organizations.

In examining the engineering regulation system, Girard and Bauder (2005) note that the "Canadian Engineering Accreditation Board (CEAB) certifies undergraduate 'engineering programs' that provide graduates with the academic qualifications necessary for registration as professional engineers in Canada" (p. 3). Within this framework, Canadian engineering school graduates are guaranteed valuation of their engineering credentials. The onus is then placed on these internationally trained engineers whose credentials and work experiences were the impetus that guaranteed them acceptance under the Canadian Skilled Workers Program. The misalignment within the system is set out to marginalize foreign trained professionals who are highly skilled, forcing them

often to take so-called survival jobs as means of gaining an income for themselves and their families.

Friesen (2011) states that credential recognition is only one aspect under the umbrella of qualifications recognition for foreign-trained professionals, "where qualifications recognition also encompasses an employer's acceptance of and confidence in an immigrant engineer's credentials, skills and competence, as manifested in labour market access and successful sustained engineering employments" (p. 80). She further suggests that credential recognition by itself can give foreign-trained professionals access to labour markets but this does not guarantee them ongoing success. Allowing foreign-trained engineers to gain Canadian experience that gives them access to professional engineering certification will strengthen their ability to continue work within the field of engineering. When the educational qualification recognition is incomplete or does not occur, it is often referred to by scholars and policy analysts as an underutilization of human capital (Friesen, 2011).

Girard and Bauder (2007) indicated that Canadian employers and professional societies alike require candidates to possess similar nontechnical knowledge and follow similar behavioural practices as a condition of both employment and licensure. Incidentally, Bauder (2006) highlights that "research also shows that economic success of immigrants often is a function of the immigrants' embeddedness in economic structures, institutional frameworks, government-policies and social practices towards newcomers" (p. 711). Shan and Guo (2013) reports on the Council for Access to the Profession of Engineering's (CAPE) survey of 802 immigrants with an engineering background in Ontario, which "noted that 54% of respondents were not working, 30% were working in

fields that were not related to their training, and only 16% were employed in engineering-related jobs" (p. 31). The practice of marginalization and exclusion for immigrant engineers is somewhat of a deterrent to successful integration of these professionals in the Canadian labour market. Regulatory bodies and employers need to act to remove these barriers that exist in providing licensing and work experience necessary for the utilization of their skills and experience. "On the one hand, immigrants with professional backgrounds are actively sought after by the Canadian governments. While on the other hand, these recent immigrants do not fare well in the Canadian labour market" (Shan & Guo, 2013, p. 30).

Other exclusionary practices also prevent immigrant professionals from entering into the Canadian job market. Creese and Wiebe (2012) suggest that there is a need to listen to the immigrants whose experiences in the labour market revealed that factors such as Canadian experience, accents, and credentials are forms of systemic racism that construct immigrants as unskilled labourers. Creese and Wiebe further add that employers and professional associations also need to interrogate practices that devalue foreign credentials. Sakamoto et al. (2010) suggest that the term "Canadian experience" is more nuanced, and some believe that employers use this as a means of taking advantage of immigrants in effort to obtain free labour. Immigrants frequently do voluntary work as a means of gaining the "Canadian experience" that is sought after by employers. It is necessary therefore to note that immigrant professionals are disenfranchised by this practice as there are very limited ways in which they can get the "Canadian experience" prior to arriving in Canada. Acquiring this non-technical knowledge is virtually impossible prior to immigrants' arrival in Canada and this

represents an unfair playing field for the immigrant professionals who wish to continue in their field of training upon arrival in Canada.

Girard and Bauder (2007) argue that the acquisition of a P.Eng designation from the regulatory body is not necessary for all employment within the field of engineering. However, the designation does signal to employers that individuals understand the habitus of the engineering profession. Additionally, they suggest that employers assume that Canadian-trained job applicants are already familiar with the workplace practices and behaviors that the immigrant-trained engineers do not possess. "In the case of immigrants, the P.Eng license signifies that internationally educated applicants have internalized the habitus of the profession" (Girard & Bauder, 2007 p. 50). Despite some of the practices that marginalize and exclude some of these immigrant professionals in the field of engineering from acquiring the necessary educational qualifications that would guarantee them a level of equality within the Canadian job market, there are still a few who would triumph over the system as a means of achieving their goals. Boyd and Thomas (2001) suggest that "systemic" discrimination results from rules and procedures that are not explicitly designed to produce differential outcomes but do so through their application. Girard and Bauder (2005) conclude that based upon their research findings, the professional engineering regulation system produces such discrimination.

Gaps in Current Research

For the purpose of this study, I focused on the validation of the educational qualifications of these immigrant engineers who migrate to Canada but are unable to find suitable employment within their field of training. Although the educational

qualifications of immigrants play an important role in getting their credentials validated, all sectors of society need to join forces to ensure success for the immigrant professionals. It is clear that marginalization and exclusion is present in the various sectors. The regulatory bodies that govern the profession of engineering need to work collectively with employers to ensure that the mandatory year of Canadian work experience is available to foreign-trained engineers as a means of acquiring their certification. There is a lack of narrative research that reveals the lived experiences of immigrant engineers as they continuously seek to secure themselves within the Canadian workplace as professionals, which this study will address. By giving these research participants the ability to tell their stories, it is my hope that when I retell their story, I will be able to do so with the same authentic voice in which it was told.

"Both narrative and life history research rely on and depict the storied nature of lives; both are concerned with honoring the individuality and complexity of individual's experiences" (Cole & Knowles, 2001 p. 20). I hope to honour the experiences of these qualified immigrant engineers by listening to their voices as they retell their accounts of the challenges they face finding suitable employment within their field. Girard and Bauder (2007) have shown that some of the participating immigrant engineers will speak of some of the challenges they face in finding employment within their field. I believe that by focusing on a small group of engineers, I will be able to gain an in-depth understanding of their challenges and successes and consequently retell their stories as a means of bringing about a greater awareness of the issue of educational qualification without suitable employment for these immigrant engineering professionals.

Summary of Literature Review

In conclusion, this literature review has supported my research topic of educational qualifications without suitable employment. As I explored the personal narratives of immigrant engineers, I can see that there is much work already done in this subject area based on my literature review, and my intention is to add to the body of literature by highlighting the experiences of these immigrant professionals. The hope here is to illuminate their lived experiences as they seek to find employment within the field of engineering and as they navigate their way through the obstacles of the regulatory bodies and employers seeking the elusive "Canadian experience." This literature review further articulates the current state of immigrant engineers' ability to find suitable employment and how marginalization and exclusion by regulatory bodies and employers plays a pivotal role in preventing them gaining upward mobility within the Canadian job market.

CHAPTER THREE: METHODOLOGY

This chapter provides a comprehensive overview of the study's methodological approach. The methodology comprises the qualitative research design, participant selection and recruitment parameters, data collection and analysis, efforts to establish trustworthiness, and ethical considerations relevant to this study.

Research Design

The study's qualitative research approach made use of narratives that shed some light on the lived experiences of internationally trained engineers in Canada. "As a distinct form of qualitative research, a narrative typically focuses on studying a single person, gathering data through the collection of stories, reporting individual experiences, and discussing the meaning of those experiences for the individual" (Creswell, 2012a, p. 502). This method will be useful as it will give participants an opportunity to create meaning and describe their own experiences. Moreover, qualitative studies such as narrative research uphold an inductive style of research that focuses on the individual's story and makes meaning of that story (Creswell, 2009).

Building on the work by Connelly and Clandinin (1990), Clandinin and Rosiek (2007) suggest that the starting point of narrative inquiry is an individual's experience; they noted also that it is

> an exploration of the social, cultural and institutional narratives within which individual's experiences are constituted, shaped, expressed and enacted—but in a way that begin and ends that inquiry in the storied lives of the people involved. Narrative inquirers study an individual's experience in the world and, through the

study, seek ways of enriching and transforming that experience for themselves

and others. (p. 42)

However, it must be noted that there is a distinct difference between the collection of

stories of individuals' lives and the utilization of narrative inquiry.

Barrett and Stauffer (2009) clarify that "while stories and the process of storying

are distinguishing features of the human experience, these phenomena are not necessarily

narrative inquiry" (p. 8). The stories in narrative inquiry may include the elements

typically found in novels—such as time, place, plot, and scene—and follow a

chronological order that ties series of events together to better represent the lives of

individuals (Clandinin, 2006; Connelly & Clandinin, 2006). But as Pinnegar and Daynes

(2007) add, "what narrative researchers hold in common is the study of stories or

narratives or description of a series of events" (p. 4). Ollerenshaw and Creswell (2002)

suggest that researchers' role is to narrate the story in the process of narrative inquiry and

identify themes or categories that emerge from the story. By doing this, the data analysis

may include descriptions of the story as well as any themes that emerge from it.

Additionally, the researcher often writes into the reconstituted story a chronology of

events that describes the individual's past, present, and future experiences that are lodged

within specific settings or contexts (Ollerenshaw & Creswell, 2002).

The purpose of the present study was to allow immigrant engineers to share their

personal experiences in an attempt to address the issue of educational qualification

without suitable employment and the challenges that internationally trained professionals

face when they immigrate to Canada. The study's narrative research design methodology

fosters and generates first-hand accounts of the stories of immigrant engineers who

migrate to Canada under skilled-workers programs that ultimately fail in their mandate to secure suitable employment for all stakeholders.

Recruitment

This exploratory study was designed primarily to gain a deeper understanding of the experiences faced by immigrant engineers rather than to generalize findings to a larger population. Individuals were recruited for this study via snowball sampling. Snowball sampling as described by Denscombe (2010) is the process of word-of-mouth referrals from one person to the next. Snowball sampling built upon and drew from my existing connections with individuals whom I have known in the engineering field, who in turn had friends or colleagues who could have been potential participants for my research.

The criteria used for recruiting these individuals included immigrant engineers seeking employment in their field of training or those who have already gained access to jobs in their field of training and would be willing to share their experiences for this research. Through the use of snowball sampling, individuals who are acquainted with these professionals provided them with the package that contained a letter of invitation and a consent form advising them of the nature of the research and what was required of them for their participation. After receiving the information package, potential participants contacted me directly and no follow-up was required by those who had recommended these participants.

Participant Selection

I selected participants for this research project by using the snowball sampling method described above after I had received approval from the Brock University Ethics

Board (File #13-304-TABER).

It was through the selection process that I was able to identify and select persons based on certain characteristics, in this case immigrant engineers. By focusing on a relatively small number of participants who best suited the criteria for this study, I was able to gain more in-depth information corresponding to their experiences and to the topic as a whole (Denscombe, 2010).

The three individuals who were selected all had engineering degrees and have lived in Canada for at least 5 years, have been underemployed or employed in another field, and have at least 4 years of experience working in the field of engineering in another country. These three individuals were selected as they have extensive qualifications and academic credentials in the field of engineering from other countries, but are unable to find employment within their field. Consequently, these three individuals met the selection criteria that were established at the outset of this research process and I focused on their stories, making meaning of such stories as I investigated the issue of educational qualification without suitable employment among immigrant professional engineers.

All three contacted me via email and we then agreed on a time and neutral place to meet to conduct the interview. Participants' ages ranged from the 30s to mid-50s. Each of the participants had a unique and interesting narrative to tell and although some of the experiences were different, several similarities could be identified among these participants as they seek out suitable employment in their field of training. To maintain confidentiality, pseudonyms were created for all three participants for the purpose of the report. The assigned pseudonyms were Sasha, Peter, and John.

Data Collection

According to Sandelowski (2000), data collection in qualitative studies primarily seeks to find out the "who, what, and where" of everyday events or experiences or their basic nature and shape. During the interview process, I collected the life stories of internationally trained engineers and organize the collected data in chronological order using a time sequence or chronology of events as told in a first-person narrative by participants. I collected the information from these individuals through a process of narrative interviewing that used open-ended questions as a means of allowing participants to share their personal experiences that formed the basis of my narrative research design, which is supported by a theoretical framework corresponding to social exclusion. Connelly and Clandinin (1990) suggest that the unstructured interview is a good data collection tool in narrative inquiry, as are the ensuing transcripts and ongoing discussions between the researcher/interviewer and participants that all form a part of the narrative record.

Pinnegar and Daynes (2007) suggest that narrative researchers and participants are in a collaborative relationship with one another with the understanding that both parties will learn and change the encounter (p. 9). Throughout the process of data collection and interviewing, it was necessary for me to establish an ongoing collaboration with the study participants. Collaborating with the participants in the study is essential because in narrative research the inquirer actively involves the participant in the inquiry as it unfolds (Ollerenshaw & Creswell, 2002). Many narrative researchers emphasize the importance of learning from their participants (Pinnegar & Daynes, 2007). Conversely, Moen (2006) advances that in narrative research the "life is told by the person who lived

and experienced it, and it is then retold when the storyteller and the researcher collaborate to produce an inter-subjective understanding of the narrative" (p. 8). In exploring the issue of educational qualification without suitable employment amongst qualified engineers who migrate to Canada seeking jobs in their field of training, I wanted to ensure that such individuals' lived experiences are conveyed to the intended audience.

Patton (2005) notes that the use of open-ended questions during the interview process gives participants the opportunity to voice their experiences without being constrained by the perspectives of the researcher or that of past research findings. Appendix B includes a copy of the interview questions that I used as a starting point for the data collection process through narrative inquiry and that allowed me an opportunity to listen to the stories of these immigrant professionals to better understand their experience as told in their own words. According to Britten (1995), semi-structured interviews are conducted on the basis of a loose structure consisting of open-ended questions that define the area to be explored, "at least initially, and from which the interviewer or interviewee may diverge in order to pursue an idea in more detail" (p. 251). My overall objective was to engage the interviewees in an attempt to get them to share their stories and the nature of the questions are such that they provided an opportunity for them to speak freely with very little prompting. The questions did not follow a sequential order because as they elaborated on their experiences during the interview process, some of them often began to address a similar question that was not yet asked. The use of the semi-structured interviewing process allowed them to give their responses as part of the data collection that was necessary to this research.

I collected participants' stories during a planned 1-hour session, and tried to maintain the time allotted for this interview in an attempt to respect the participants' time. Participants were advised that there might be a need for a follow-up interview to cover any points or address any additional questions that came out of the first interview. The pre-arranged meetings ensured that I had an opportunity to get all the details of their story, and this ensured that the stories fully represented the participants' voices. There were no follow-up interviews done with any of the participants as all the points that needed to be addressed was done at the first interview. During the member check process however, Peter gave further clarifications to some points that were transcribed from the transcript.

Data Analysis

For the narrative interviews, I recorded the participants' stories with an audio recorder and supplemental notes were also taken to capture participants' body language, facial expressions, and intonations. Since all participants belong to the immigrant population, I listened and observed attentively during the interviews as the participants' linguistic accents on the recordings might not have correctly captured the essence of what they had communicated. This was useful as it allowed me to retain and review the essence of what was shared by the participants. I transcribed the audio-recorded interview data and analyzed the information, looking for themes that emerged from the stories told. "Analysis also occurs as an explicit step in conceptually interpreting the data set as a whole, using specific analytic strategies to transform the raw data into a new and coherent depiction of the thing being studied" (Thorne, 2000, p. 68). I sent a copy of the transcribed notes to each participant via email requesting that each participant verify the accuracy of our

conversation and to add or clarify any points. Again, this was done to ensure that the transcribed data from the interview captured the intent of their story.

Using narrative analysis, I was able to identify the themes that emerged from the lived experiences of the participants (Kohler Riessman, 1993). During the data analysis, I assigned codes to segments of the data and identified major themes running through the data. This allowed me to flesh out redundancies and overlaps in the data collected (Creswell, 2012b). In using a social exclusion and marginalization framework, I searched for commonalities among my research participants in assessing the issue of educational qualification without suitable employment faced by the immigrant engineer. According to Strega (2005) and Potts and Brown (2005), the research itself is the analytic tool, especially if the researcher stays in the moment as the participant relates his or her story. This I achieved while listening attentively to the research participants as I reflected critically on my role as the researcher during the process.

I adhered to Ellis's (2004) view on the subject and treated "stories as data" and used "analysis to arrive at themes that illuminate the content and hold within or across stories" (p. 196). This allowed the data to follow a systemic order, making the task of re-telling the stories easier by organizing key codes in sequence. Narrative inquiry often involves coding field texts such as interview transcripts for themes or categories (Chase, 2005). Pinnegar and Daynes (2007) assert that even through the "data collection process of the narrative study it is important to reflect a reciprocal and caring researcher/ researched relationship, particularly during the data analysis and/or restorying process to preserve a certain degree of distance between…researcher and the subjects being researched" (p. 11).

Arranging the elements of the stories told in sequential order allowed the information to flow in a systemic way, thereby allowing readers to have a clearer understanding of the issue at hand. Once this was completed, I collaborated with the participants to ensure that they were satisfied with the story told from their viewpoints and to ensure that their voice was not lost through the process of the reporting.

Trahar (2009) suggests that narrative inquiry is useful as a research method, as it allows for more than one voice to be applied while courteously pushing the narrator's own voice to the forefront. It does so by creating a respectful distance between the voices of the researcher and the narrator. "Researchers conducting qualitative studies want to collect as much data as they can that will allow them to capture all of the elements of an event that come together to make it the event that it is" (Sandelowski, 2000, p. 336). Becker (1996) also suggests that qualitative researchers cannot "insulate themselves from data" (p. 56) as readily as quantitative researchers. Therefore, I had to become a part of the story while collecting the data and listening to the stories of these participants, as I relate my experiences of individuals who I know have shared this common burden.

Establishing Credibility

Cavanaugh (1997) suggests that qualitative researchers should strive to achieve reliable and valid results and qualitative researchers should give consideration to three types of validity: content, hypothesis, and predictability. The stories told in qualitative research are usually those of the participants. The challenge that I faced as a researcher is the validation of the series of events that transpire as the story unfolds. Creswell and Miller (2000) indicate that qualitative researchers do not rely so much on scores or instruments or even research designs as they do on the views of individuals who

participated in, conducted, and read or reviewed a study. One can judge the authenticity of the story told through the ongoing interaction with the participant. Moen (2006) argues that the most critical technique for establishing credibility is to solicit the research subjects' views of the credibility of the findings and interpretations. Moen further adds that "this verification procedure involves taking data analysis, interpretations, and conclusions back to the research subjects so that they can judge the accuracy and credibility of the account" (p. 8).

By looking for gaps and identifying misalignment in the series of events, one can best determine the trustworthiness of the qualitative research. Patton (2005) suggests that the researchers' credibility is of particular importance in qualitative research since they are the major instrument of data collection and analysis. Additionally, Creswell and Miller (2000) opine that a lens used to establish credibility is that of the researcher; the researcher determines how long she or he will remain in the field and assess if the data are saturated to establish good themes or categories, as well as the evolution of the data in creating a persuasive narrative. As the researcher, it is important to analyze the data to ensure that the information provided can be organized in such a way that there is fluidity of a coherent narrative. Citing Lincoln and Guba, Shenton (2004) argues that ensuring credibility is one of the most important factors in establishing trustworthiness and that provision should be made to promote confidence that the researchers have accurately recorded the phenomena under scrutiny. Accurate recordings of series of events as told by the immigrant engineers during the interview process will be a vital part of data collection to ensuring that credibility is preserved.

By continuously collaborating with the study participants over a period of time, I

was able to assess credibility. The absence of new emerging data or the presence of

repetitive information is a sure sign that there is saturation of the data (Houghton et al.,

2013). In trying to assess the credibility of information collected during this qualitative

study, I had to ensure that I paid careful attention to these cues to ensure that the best and

most accurate data were collected as the individuals told their stories in narrative inquiry.

Ethical Considerations

Clandinin (2006) suggests that those wanting to learn to engage in narrative

inquiry "need to imagine ethics as being about negotiation, respect, mutuality and

openness to multiple voices" (p. 45). Although ethics in this case involved the filling out

of forms submitted to the Ethics Review Board at Brock, it also meant that the practice of

ethics would be maintained throughout the entire research process to ensure that the

interviews would be conducted in a sensitive and responsible manner. The main ethical

issues are those related to the treatment of individuals in narrative research and those that

ensure that the researcher secures the voluntary and informed consent of these individuals

as they will be serving as data sources. It was essential to inform them fully of the

consequences of participating in the research and to ensure that their privacy and

confidentiality in the process was maintained when necessary (Smythe & Murray, 2000).

Additionally, Smythe and Murray (2000) note that the ethical responsibility begins at the

recruitment stage and the nature of narrative research is such that it asks participants to

share personal and identity-laden data. But because participants may not be the best

judges of the potential consequences of sharing their stories, the onus therefore is on the

researcher to use her/his discretion during the selection and recruitment phase of the

research. I therefore ensured that confidentiality existed between the researcher (myself) and the participants, and that any information was shared only by consent.

Pseudonyms were used for participants as their real names were not disclosed in this research. The information supplied by participants during the research is held in confidence and personal identifiers were not used in this publication. The data collected on the recorder are safely stored in a locked cabinet, along with any handwritten notes. Any typed information is kept on my personal laptop which is password protected. I was careful to consider that these individuals volunteered as research subjects and I thus maintained an appropriate ethical stance throughout the research.

Chapter Summary

In summarizing the methodology that I used in this qualitative, narrative-inquiry based research, I wish to acknowledge the theoretical framework of social exclusion and marginalization that underpins the study. As I listened to the stories of the lives of these immigrant professional engineers who are unable to secure suitable employment in their chosen field, I was able to pick out the themes and identify commonalities between the stories told. The use of open-ended questioning was of paramount importance as it set the tone and direction of the interviews. Once I had collected the data, I was able to organize the information and through ongoing collaboration with the participants I also ensured that I maintained the data's authenticity.

CHAPTER FOUR: FINDINGS

This chapter reports the qualitative study's findings as they pertain specifically to the problems of educational qualification without suitable employment that were revealed through the personal narratives of immigrant engineers. These findings however do not imply that the data are objectively factual but instead reflect the lived experiences of these immigrant professionals when they arrived in Canada and sought (and continue to seek) suitable employment within their field of training.

Several themes emerged from the data analysis process and I colour-coded the themes with highlighters to organize the data for interpretation. Although there were many such themes, I distilled the data into the following themes for discussion: financial challenges; professional credential recognition; barriers to suitable employment; skilled workers program; and the role of the Canadian government.

Participants

First, I provide an overview of each participant as they related their experiences in finding suitable employment within their field of training.

Sasha's Story

Sasha is a female in her mid-50s who emigrated from mainland China with her husband. She initially immigrated to Germany as that was the first opportunity for her to leave China, however her goal was to live in Canada. Another opportunity came up for her to immigrate to the U.S. and she immigrated there after studying German at the university level for 2 years. She stated that "USA was much better than Germany" and that she wanted to study in the U.S. and had transferred her student visa to the latter country. Prior to leaving China, Sasha held an engineering degree specializing in

precision instruments. She had worked for 4 years in the timber industry, after which she worked another 4 years as a professor in a technological institute.

Sasha expressed that she applied to come to Canada under the points system, after her son was born in the U.S., so that she could realize her dream of working and living in Canada. Since Sasha and her husband both held engineering degrees and had met the criteria for acceptance under the skilled workers program, they applied and were granted landed status and migrated to Canada to realize her dream and begin her life in her newfound country. Sasha describes her experience of coming to Canada as a feeling of stability. She explained: "I feel stable when I come to Canada, I can now relax and enjoy the Canadian experience." To her dismay, she did not have an easy transition into the workplace as she had initially anticipated, due to her prolonged search of finding suitable employment within her field.

Sasha further explained that: "I don't have North American experience, the language problems and I don't have money to go back to school to get Canadian education, my child is small and I have to take care of him." Sasha began her job search for any suitable employment, and tried to look for jobs within industries that corresponded to her university studies. Sasha initially took a survival job at a factory that manufactures canned goods, but this was a night job which posed some additional challenges with caring for her small child at that time. Through recommendations of her friends, Sasha applied for a posting as an assembler in a microwave engineering company based in Canada. Sasha decided that when she applied for this position, she would omit the fact that she had an engineering degree; for fear that this information might prevent

her from accessing the assembler position. She did so upon the advice of her friends who felt that an engineering degree would suggest that she is over-qualified for the position.

She was successful in getting the job as an assembler, but had her sights set on the technical department within the company, where licensed technicians worked alongside engineers testing and validating various electronic products. When the opportunity presented itself, Sasha was interviewed for a technician's position within the organization where she currently works. She advised them that she had an engineering degree from China, which was one of the reasons that allowed her to be a successful applicant for this position. Since Sasha was from one of the assembly departments and the position required some technical training, her electrical engineering degree proved to be an asset as she was now able to meet the requirements of the technician position. Sasha was very happy that she was able to work as a technician, as she saw this as one step closer to practicing within her field in Canada. Sasha recalled her elation in transitioning from an assembler to a technician. "I did not work as engineer, but I am able to test the amplifiers, this is a very big accomplishment for me, I can somehow use my engineering knowledge to troubleshoot problems with amplifiers." Sasha felt that although she cannot practice engineering, she feels very satisfied working as a technician as she views this as an acceptable compromise to her engineering job she held back in China.

Peter's Story

The second participant was Peter, a male in his 50s who had emigrated from Bangladesh. Peter cited economic and political conditions and a need for a better life for himself and his family as some of the major reasons for migrating to Canada. Peter worked for the Bangladesh air force prior to leaving his job and was a senior officer in the military. Peter worked as a mechanical engineer for over 15 years and his major

responsibility was overseeing those who ensured that the aircraft met all the quality standards and were suitable for flying. Peter felt that he had a good job working for the air force, but felt that the country was densely populated and was rife with corruption that prevented him from living a comfortable life. The living conditions combined with the political and economic challenges were the driving force that compelled him to migrate to Canada.

Peter wanted to leave the air force and migrate to Canada, but this in itself posed a challenge for him, as he was not able to apply to leave the country using a Bangladesh government-issued passport. In order for him to apply to the Canadian High Commission, he would need a civilian passport. He spoke of the challenge that he had in trying to be relieved from his duties in the military and to receive approval from the Bangladesh government. He was not granted early retirement and instead had to serve as an instructor in a training school prior to being granted early retirement. Despite having to go through this lengthy process to leave the air force and apply for permission to leave the country, Peter expressed that he had a goal in mind and his only focus was to migrate to Canada. Once he had received the clearance he then applied for a civilian passport and then submitted his application to the Canadian High Commission in Singapore, as this was the entity that dealt with Bangladeshi citizens.

Peter recalled that when he initially applied under the points system back in 2001, he scored 90 out of 100 points; however, at some point during the application process, the point system was revamped and he found that he did not have the qualifying points. He needed to take an English test of which he scored 7 out of 10 and this was the missing factor that finally granted him the landed immigrant status to migrate to Canada. Peter

noted in particular that a prerequisite for serving in the Bangladesh air force was a strong command of the English language, He remarked; "English is the first language in the air force, everything is in English, the manuals are English, we read, write, and communicate in English; if we cannot communicate in English, write, speak, or explain, you do not qualify to work there." Peter emphasized this to show that working in the air force had given him a good command of the English language which strengthened his application for migrating to Canada.

Once he had migrated to Canada, Peter had great hopes of continuing in his field of training as a mechanical engineer and applied to some of the major airlines in Canada. This became a daunting task as he only received a single telephone interview from one of the major airlines in Canada, and there was no follow-up communication or feedback concerning this interview. With limited money and the need to continue to support his family, Peter started seeking out survival jobs. He noted that he applied for several postings in the local newspaper; he applied to stock shelves and some of the responses he received claimed that he was overqualified based on the resumé he submitted. He secured a job at a manufacturing company in Toronto, which made microcircuits and other sub-assemblies for the various electronic companies. He later had a position in that company to work as a technician.

Having a strong desire to work as a mechanical engineer, Peter decided to apply to the PEO where he would be able to acquire his license to work as a an engineer and the P.Eng designation would increase his chances for work in his field of training. He successfully completed the PEO exams and got his credentials validated to be equivalent to Canadian standards and only required 1 year working as an apprentice alongside a

licensed professional engineer to acquire his license. Peter waited for a couple years before he was able to complete his license to become a professional engineer and had the opportunity to work alongside a professional engineer to gain the 1-year Canadian experience which is a pre-requisite to licensure. Peter received a 1-year contract working for the government of Canada, but since the termination of the contract he has not been successful in his current search to find a job in his field of training despite now having a professional designation to practice engineering in Canada.

John's Story

The final participant was John, who is between the ages of 30 to 40 and who holds a PhD degree in Engineering. He arrived in Canada from France as he had done his postgraduate studies in a French university. John remarked that he is originally from Cameroon and had received his Bachelor's degree in electrical engineering there. While he was living in Cameroon, he often saw advertisements by the Canadian government portraying Canada as a wonderful place to raise families and that Canada was seeking out educated professionals in all fields. This was the impetus that drove John in his quest to migrate to Canada to work and raise his family. Based on the depiction of Canada to those outside of the country, this was the ultimate place where John wanted to live.

While living in Cameroon, John's dreams and aspiration was to leave after he completed his undergraduate degree, but he did not acquire sufficient experience and knowledge in his field that would allow him an opportunity to be a successful applicant under the skilled workers program. John secured a job in Cameroon as a university professor, teaching technical courses that related to engineering. After he had saved enough money, he then decided migrate to Europe where he studied and received both his

Master's and PhD degrees in engineering. One of the driving forces behind John's relentless pursuit for higher education was his ultimate goal of migrating to Canada.

John worked for an aerospace company in France for a number of years and eventually left that company to migrate to Canada under the skilled workers program. Since French was his first language, he had no problem transitioning into Canada as he spoke one of Canada's official languages, along with his other credentials and qualifications that guaranteed him landed status in Canada. John faced several obstacles when he migrated to Canada, as he had not realized that he would have had such difficulty in finding a job as an engineer. He was quite confident that his European credentials would guarantee him a job to work as an engineer in one of the companies that he had applied to. After getting several interviews, he was not successful in securing a position, as he was told that he needed to have Canadian education and Canadian experience.

Although financially strained, John decided to return to school and enrolled in one of the local colleges where he studied wireless networking. As John reflected on the difficult decision he took when he decided to go back to school, he remarked,

> I'm stressing all night because it's something very serious and I had to take that difficult decision to go back to school. I went back to college, I went to College for a year because if people keep telling me you need Canadian education then I would have to go and get this certificate, just a certificate to complete what I have from abroad.

After the completion of his certificate, John decided that he would employ a new strategy when seeking work in his field; he modified his resumé such that he would eliminate the

fact that he had a PhD as he felt that this may have hindered his candidacy for employment in certain positions; as he remarked,

> I use a new strategy. I thought my PhD was a very high level and people may think that maybe I will ask for a lot of money and then I use a new strategy, why don't I go from a lower level and I use what I would call a small door to go into the company where I am working now.

He accepted a job as a technician and looked for any opportunity that he may use to bring attention to the fact that he has higher educational qualifications as an engineer.

John reflected on some of the survival jobs that he had to take in order for him to support his family, but never lost hope of his lifelong dream to practice engineering in Canada. He also indicated that he left a very lucrative job in France, as he was offered a position as a senior design engineer, but gave up that opportunity as he had an ultimate goal of migrating to Canada because he believed it was the best place to raise a family. Credential recognition was a major issue for John because he had spent money to get his credentials recognized but the company to which he applied indicated that the credential recognition would only be accepted if acquired through a University of Toronto program. John was frustrated that although he had taken steps independently to get his credentials recognized by another organization prior to coming to Canada, this was not sufficient as only a particular organization is deemed appropriate for this recognition. John is still underemployed and is currently working as a junior engineer. He is however grateful for this progress and continues to hope that his PhD will allow him to receive the recognition that he deserves.

When assessing both the literature review and the participants' narratives, it is

clear that immigrant engineers to Canada face both positive and negative experiences when seeking out suitable employment in their field of training. All three engineers were very hopeful when they made the decision to immigrate to Canada; there was a level of apprehension facing the unknown, but they all felt that Canada was the best place to live and raise a family. Their pursuit to realize this dream was fraught with challenges and setbacks, but their individual desire to live in Canada was evidenced in their experiences to find suitable work as a means of supporting their families. Both Peter and John cited that language and accents might have hindered their ability to find suitable employment while Sasha was more resigned to the fact that her English was not up to par, which limited her job search as she did not have the confidence needed to aggressively seek out engineering positions within various organizations.

Themes

As noted earlier, data analysis derived from the participant interviews revealed five themes: financial challenges; credential recognition; barriers to suitable employment; skilled workers program; and the role of the Canadian government. These themes relate to the experiences of these immigrant professionals as they transition to Canada as they seek out employment in their field of training. The financial challenges speak to the issues that all three engineers faced when they arrived in Canada and recognized that the money they arrived with would not sufficiently support themselves and their families. In looking at credential recognition, I will assess how the governing bodies and employers alike take into consideration education and work experience that is acquired outside of Canada. The discussion of barriers to suitable employment will shed some light on the employment landscape for these professionals and how they navigate their ways in

finding work. A look at the skilled workers program—the gateway through which these professionals gained access to migrate to Canada—will show commonalties between the experiences of these professionals. The last theme is the role that the Canadian government plays in immigrant professionals' successful transition to employment and quality of life in Canada.

Financial Challenges

All three participants talked about the financial challenges they faced when they migrated to Canada. Despite arriving with a set amount of money that would allow them to settle within their new environments, they all faced the added challenge of allocating some of these funds to pay for their credentials to be recognized, along with the difficult decision of returning to school. According to John, "because you have to feed your family, you have to pay your bills … and you came across some situation where you would do every kind of job … just because you want to survive." Peter spoke of similar experiences:

> the money I brought I thought would at least last me until I get a job … not a professional job, any job. … Need to start meeting the basic requirements of my family. … Still I managed with the money I brought until I got a security job.

Both men faced the harsh reality of not having enough money to support their families and this sparked a greater desire to accept any work that they could get, just so that they could have an income. Sasha's experience was somewhat different, yet not unique; she spoke of her need to work and help her husband provide for her toddler son, however the impact of financial challenges was felt in her inability to return to school to update her credentials and acquire the Canadian education that employers expected.

John spoke of the difficult decision he had to take to return to school to acquire some Canadian education, despite the fact that he and his family were not financially sound to do so. As he shared,

> I'm stressing all night because something very serious and I had to take that difficult decision to go back to school. … So I went back to school I spend the year, yes, spend a lot of money. … You have to feed your family so it was a tough moment.

The challenge that Peter faced was in getting his credentials recognized due to limited finances; he said it took time for him to get the necessary credential recognition due to financial reasons. Finances appeared to be a challenge for all three participants as meeting the obligation of their family was the number one priority. Although they entered the country as new immigrants with a high level of professional qualification and money that they felt was adequate to support their families until they found suitable employment, all three participants spoke of the challenges related to financial resources. The acquisition of survival jobs was a necessary endeavour as they needed a way to support their families as newcomers to Canada.

This theme prevailed throughout the narrative and the participants often referred to the fact that as new immigrants they came to Canada with all the money they had saved and the purpose was to have a better life for themselves and their families and continue in their professions and make an honest living. Survival jobs became the only means in which they could do so, and it is obvious that the lack of financial resources due to unemployment and underemployment are major factors that the immigrant engineers experienced.

Creese and Wiebe (2012) and Girard and Bauder (2005) describe another challenge that the immigrant professional faces by being delegated to accepting low wage, unstable, so called survival jobs when they do not have access to jobs within their field of training. Peter indicated that one of the first jobs that he got was a survival job working as a security guard. He felt that he had no other option as he needed to find some means of supporting his family. Sasha spoke of the factory work that she was relegated to accept, and this type of environment was very new to her, but the desire to work and help with household expenses was necessary at that time.

Guo (2010) recognizes that the devaluation and denigration of immigrants' prior learning also acts as barrier that prevents them from acquiring jobs within their field of training. John felt a sense of bewilderment when he recognized that his PhD degree in engineering was not enough to grant him access to a job in his field and he had to accept a job with a communications company, working as technical support to individuals who called in to get their cable and Internet issues resolved. He indicated that it was a very disturbing time in his life because although he had studied very hard to achieve his degrees, his prior learning and experience was being devaluated by Canadian employers who were seeking Canadian education and Canadian experience. By taking survival jobs, these professionals will never have an opportunity to gain the experience within the workplace learning environment, which also would help them gain the elusive Canadian experience.

Credential Recognition

Credential recognition became another major obstacle that all three participants faced. The process of accrediting new immigrants who have some previous experience

from their home countries is a daunting experience. The issue of credential recognition was seen as only one aspect under the umbrella of qualifications recognition for the immigrant professional (Friesen, 2011). Along with this the participants' narratives revealed that the accreditation process that new immigrants must undergo to get their credentials validated continues to pose a challenge for these immigrant professionals. The participants spoke highly of the degrees that they held but they also had not realized that these very prestigious degrees would not by themselves be enough to guarantee access to the Canadian workforce. To John's bewilderment in his pursuit for suitable employment, he was told that he needed Canadian education despite holding a PhD degree in a related field. He therefore took the initiative to return to school to get "Canadian education" to secure a job in his field of training, which in the end he believed was an unfruitful exercise. The literature revealed the process of becoming accredited in Canada and the difficulties that come with such a process. Reitz (2005) stressed that immigrants have higher educational credentials than the average Canadian; nonetheless, the employment opportunities for these immigrants have become increasingly scarce.

John stated that although he taught as a university professor in Cameroon, he felt that further study in a Canadian college might provide an opportunity for gainful employment:

> If people keep telling me "you need Canadian education" then I would have to go and get this certificate, just a certificate to complete what I have from abroad. And I did that certificate on wireless networking. … It was very tough and I did that year with a PhD in my back pocket that wasn't used. You see, what can I do, what should I do to get a job in my field and everybody in the street would say

> here in Canada you have to have Canadian education and no matter what it is, you
>
> have to go to school here in Canada

The experience of returning to school for John proved to be a means to an end, as his hopes were that acquiring Canadian education would help him secure the job that he left in his home country to pursue the so-called Canadian dream. John employed a credential accreditation firm to validate his credential but even after getting his credential validated to be equivalent to a Canadian PhD, he still was unable to find work.

According to Li (2001), there are several factors leading to the disparities for immigrants regarding Canadian-accredited education. These include: (a) "little worth placed on marketability," especially for those who are not from a European background and for immigrants of a visible minority; (b) "not having racial features"; and (c) the "linguistic ability" of Canadians" (p. 24). The challenges these immigrants face have a definite impact on their experiences in the Canadian education system and, subsequently, affect their employment opportunities. Li concluded that the Canadian government needs to change the way it supports immigrants and their educational achievements from their country of origin.

Peter had a similar challenge in getting his credentials recognized; despite holding a degree in mechanical engineering and having worked for several years as an engineer in his country of origin, he still had difficulty finding work. The words "Canadian education" and "Canadian experience" seemed to be the buzz words for the jobs that he had applied for and so he finally made the decision to apply to the PEO to earn the professional engineering designation. Peter recounted his experience when he applied to the PEO and discovered that one of the requirements was a valid engineering degree:

"this was not an issue for local grads, however for immigrants they are required one year of schooling to complete three courses in a Canadian institute or sitting of a test which would prove that they have the suitable educational qualifications." Upon successfully passing the test, Peter was then allowed to take the professional practice exam (PPE) in which he was successful and proved to be one step closer towards his acquiring of his professional engineering designation.

After having his credentials validated and successfully passing the PPE, Peter still had to complete the required 1-year work assignment alongside a professional engineer in order for him to receive his P.Eng designation. This was yet another obstacle that Peter felt he needed to overcome to recognize his dream of working as an engineer in the Canadian workplace. He received the Engineer in Training (EIT) status while he waited to complete the 1-year work experience that would eventually guarantee his P.Eng designation. Peter felt that luck was on his side as he had the opportunity to work alongside a professional engineer for 1 year, which subsequently allowed him to earn his P.Eng designation.

The workplace learning environment is essential in helping these immigrant professionals gain the Canadian experience that most employers seek. As was indicated by Spencer (2010) on some occasions workplace learning can be beneficial to the employer by creating a more skilled and efficient working environment as workers become more valuable human resources. As we can see from Peter's experience, he received an opportunity to participate in the workplace learning; by working alongside a senior engineer, he benefited from the workplace learning environment which eventually allowed him to acquire his P.Eng designation. Sasha did not have the similar experience

in the area of credential validation as the others. Despite arriving in Canada with an electrical engineering degree, she wanted to get her credentials validated, but realized that she would need to return to school in Canada in order for her to be successful in this endeavour.

Despite the fact that Canada has an accreditation process that would have given her equal qualification for her degree, Sasha remarked; "I don't have North American experience, and maybe the language problems are here." Sasha felt that such a language barrier would have prevented her from gaining the necessary validation needed to help her find work as an engineer. Sasha felt that her command of the English language was not her strongest point and this also hampered her search for jobs, as she lacked the confidence that employers are looking for. She had indicated that she went back later to do some courses that would help her improve her command of the English language. As was noted by Sakamoto et al. (2010) the Canadian experience is both a combination of the hard and soft skills that pertains to certain jobs, some of which may be more difficult to articulate and may include an understanding of Canadian workplace culture and the communication skills necessary to operate effectively within it. Hence the workplace learning environment would have played a pivotal role in helping these immigrant professionals acquire the Canadian experience necessary to gain employment in their field of training.

Throughout the narratives all participants had a dream of coming to Canada and despite the fact that their educational qualification was the biggest factor in helping them to acquire Canadian status under the skilled workers program, they did not consider that they would have had such a challenging time in getting their credentials recognized. The

pursuit of suitable employment was an impasse and they felt that Canadian employers look for individuals with Canadian experience, despite the fact that some of them had acquired some level of Canadian education through credential recognition and a return to Canadian schooling which was a prerequisite for some employers. Friesen (2011) summarized this predicament:

> Engineering employers concur that the most important factors influencing immigrant engineers' level of employment are prior related Canadian experience, communication skills and professional licensure. Credentials recognition is only one aspect under the umbrella of qualifications recognition for foreign-trained professionals, where qualifications recognition also encompasses an employer's acceptance of and confidence in an immigrant engineer's credentials, skills and competence, as manifested in labour market access and successful, sustained engineering employment. (p. 80)

Brouwer (1999) suggest that "Canada is forgoing the windfall to its economy of so many educated and fully qualified workers for whose education and training Canada has not paid a cent by failing to recognize foreign qualifications" (p. 5). The credential recognition which is an essential part of the immigrant engineer's journey in transitioning into the Canadian workplace has obstacles present at every turn; however from the narrative of these engineers, they seem to be resolute in fulfilling their dreams of playing an integral role in the Canadian economy.

Barriers to Suitable Employment

The participants' narratives identified several barriers to acquiring suitable employment. The participants did not use the terms marginalization and exclusion to

describe an apparent barrier, but several similar terms were used by these individuals as they recounted their experiences and how they were treated during the process of their job search. Sasha identified the language barrier and admitted that her knowledge of English was not her strongest point, and she believed that this prevented her from gaining access to some jobs for which she had applied. She felt that employers ask for North American experience but questions how new immigrants can gain North American experience if they are never hired by anyone. Bauder (2006) identifies that immigrants are routinely discriminated against as mere labourers that often occupy jobs requiring skills well below their qualification level and he identifies these occurrences as a type of marginalization and exclusion of the immigrant community. Peter, who describes himself as very optimistic, tried to identify some of the reasons he was unable to find suitable work despite having the educational qualifications:

> I did some soul searching to determine whether I am a good fit, my skills, my experience and the basic requirements for the job … based on my gut feeling, maybe companies do not want to hire me because they may have to put some effort into training and all these things.

While Peter alluded to some form of discrimination, he did not label these experiences as marginalization and exclusion; however, he reflected on a particular experience in which he felt there were some discriminatory hiring practices at play: "In my search for work, I found on one company's website that they are looking to hire local grad, I saw this is clearly discrimination." Peter continued, "I talk to my friends and after that I contacted the Human Rights Commission about this posting. … I did not hear from them, but after a few weeks, I saw that the company changed the wording of the

advertisement." Peter indicated that he felt strongly that the company was still looking for local grads, but was doing this in a covert manner. Peter indicated that employers are not honest; they indicate that they are looking for individuals with certain educational qualifications and experiences but when he applies, he is told that he is overqualified for certain positions. Additionally, he felt that due to his foreign accent, he is regarded as someone who does not speak English well, which he felt was a form of discrimination. Peter spoke proudly of his tenure in the air force and the fact that all communication was done in English as this was mandatory requirement to work there, however he felt that when he went for interviews, his accent may have been an issue for prospective employers. As Bauder (2003b) indicates, "perceptions of cultural differences between Canadian-born and immigrant workers can sometimes typecast these professionals into certain occupations" (p. 416).

John's challenge was although that he spoke one of Canada's official languages fluently (as French was his mother tongue from his native Cameroon), he decided to settle in English-speaking Canada. His challenge was to learn the English language and felt that this may have been a barrier for some of the interviews he went on. Even after successfully completing the English courses which strengthened his communication skills, he still had some difficulty communicating with prospective employers. He knew that his was an area of weakness, but felt that he was able to correctly understand the questions he was asked on the interview and felt that he responded to the best of his ability. John reflected on whether he felt that his English was a barrier:

> Some time I thought it was a barrier but I also think it cannot actually be a barrier
>
> because I'm working now in a new company where I see people come in from

everywhere, all over the world and some people don't even speak proper English but if you look at what they are doing for their work they are doing it properly they don't need that language to do the proper work. So it's a kind of confusion, is it a barrier or is it not a barrier, so you don't really know.

John further stated that immigrants might not have perfect English and their speech may be laced with a heavy accent, as they are coming from different countries, however he felt that employers should consider individuals' educational qualifications and whether they meet the minimum communication requirements for the job. John also believed that employers' tendency to seek individuals with Canadian experience was another barrier that prevented him from finding suitable employment: "So I have the Canadian education, how can I have the Canadian experience if no one wants to hire me?"

Seeking such experience became a daunting task, and he felt that the Canadian-experience requirement was deliberately included to keep newcomers out of certain positions. John felt that this was unfair to newcomers as the Canadian experience was not one of the criteria that were outlined prior to coming to Canada, and he again wondered how he could gain such Canadian experience if no one gave him the opportunity. He further highlighted that he could see others with similar educational qualifications getting jobs in the field of engineering, however he couldn't fully understand the reason why he was not successful in his job search. As Guo (2010) suggested earlier, immigrants at times are deprived of opportunities to gain work experience due to obstacles that block access to labour market, as many employers are seeking candidates with Canadian experience. This was evident from the participants' narratives and continues to be an issue for some of the participants who are still seeking work within their field of training.

In his assessment of the impact of race relations, Brouwer (1999) posits that visible minority immigrants who often find themselves shut out of their occupations for which they are qualified view themselves individually and collectively as alienated victims of institutional discrimination. Such alienation results in mounting tensions between themselves and members of other groups who are not excluded from employment opportunities. Slade (2008) notes that

> Studies have identified that employers almost completely devalue international work experience (Reitz, 2001b) and that the equivalency of international credentials is not readily understood (Boyd & Schellenberg, 2007; Girard & Bauder, 2006; Li, 2003; Reitz, 2001a). This suggests that immigrant engineers are marginalized from the engineering labour force if they do not have a licence. The professional licence is the Canadian seal of approval that translates international credentials and experience into Canadian equivalency. (p. 33)

One of the barriers that can be seen from the experiences of these three immigrant professionals is highlighted in the works of Guo (2010), Bauder (2003), and Girard and Bauder (2005) that show that the non-recognition or devaluation of immigrants credentials by regulatory bodies who act as gatekeepers further marginalize and exclude these professionals as they seek to find work within their field of training.

With this in mind, marginalization and exclusion together represent a major barrier that prevents the participants from successfully finding work within their field of training. As the research highlights, employers seek those with Canadian experience and Canadian education and do not recognize the education or work experience of highly trained immigrant professionals.

Federal Government Skilled Workers Program

The central mode of arrival to Canada for these skilled immigrants was the federal

government's skilled workers program. As was highlighted earlier, this program opens

the door to Canadian immigration for foreign-trained professionals who meet certain

criteria set out by the program. At the very core of this program, immigrant professionals

who have varying degrees and work experience and acceptable command of one of

Canada's official languages (English or French), can migrate to Canada once they have

met the criteria prescribed by the program. Having arrived on the skilled workers

program, all the participants felt that once settled in Canada, they would readily have

access to jobs within their field as they arrived armed with the requirements and

educational qualification necessary to continue in their field of specialization.

John recounted his experience of going through the process prior to coming to Canada:

> It was many steps; I would say two main steps. The first is credential and
>
> professional background and everything else … then the visa application. The
>
> first step is the most important and then they qualify you, but when you come
>
> through the country they are still looking for that educational qualification that
>
> they have already done.

His general feeling was that the skilled workers program authenticated his credentials by

granting him access to migrate to Canada because he met the criteria stipulated by the

program; however he was still unable to find work in his field, despite advertisements

outside of Canada that suggested that Canada is looking for skilled professionals to

migrate here. Discussing the skilled workers program, McLaughlin and Salt (2002)

explain that "skilled workers are selected for their ability to participate in the Canadian

labour market, based on an assessment of their labour market skills" (p. 45). The program

took into consideration the applicants' prior education and work experience prior to

granting them permanent residence status. "Emphasis is placed on education, language

proficiency, occupational skills, work experience and practical training" (McLaughlin &

Salt, 2002, p. 46). Brouwer (1999), in his assessment of immigrant professionals who

migrate under the skilled workers program but are unable to find suitable work, opines

that:

> Most engineers, who immigrate to Canada, usually on our country's warm
>
> invitation, fully expect to practise their profession upon arrival. Many, however,
>
> end up in jobs totally unrelated to their training. Some end up with no work at all,
>
> their skills and talents wasted. The situation is repeated over and over again across
>
> the professions, and to a lesser degree in the trades. (p. 3)

The skilled workers program provides professionals who want to migrate to

Canada with an opportunity to participate in the Canadian workplace. Peter noted that

although he initially had scored 90 out of the 100 points that were required to be a

successful candidate under the program, the point system was revised mid-way through

his application and he found that he was no longer qualified:

> When it changed, the consultant who was processing my application told me that I
>
> am not eligible unless I submit my International Language tests results. I had a
>
> score of 7 out of 10 and this was what qualified me to come here.

He felt that despite the change that was made to the point system during his application,

he was still able to meet all the criteria required under the system and felt that his degree

and qualifications were the major factors that allowed him to migrate to Canada and that would eventually allow him to practise his profession here.

Sasha indicated that both she and her husband had engineering degrees that allowed them to meet the criteria for the skilled workers program. There were other factors that were present for them to meet these criteria; however their professional qualification had the greatest weight as they were both professionals back in China. Qualifying under the skilled workers program was a passage for a brighter future; however the prospects of finding a job as an engineer for Sasha remained daunting.

Role of Canadian Government

A theme that was very subtle in the participants' narrative was the role of the Canadian government in attracting foreign-trained professionals to migrate to Canada. John spoke very fondly of the great lengths to which Canada is advertised outside of Canada in newspaper advertisements and on the Government of Canada website that he viewed while living in Cameroon:

> When you are out of Canada you see a lot of advertisement about the quality of life in Canada and people in Canada … or the government in Canada is willing to get skilled people into the country. … This was the kind of motivation … I wanted to secure a better life for my family and for my children's education.

He also spoke of newspaper advertisements that depicted Canada as the best place to go and this became a dream that he would work very hard to make a reality. John alluded to the fact that this portrayal can be somewhat be misleading if the Government does not do something to help immigrant professionals once they arrive in Canada.

Sasha also commented that the Government website also showed that Canada needs skilled professionals, which included the field of engineering. Peter, on the other hand, remarked that "on the Immigration Canada website, there are several options for engineers to come, and I wonder, which employers, which geographic locations, because I applied to positions in Alberta and have not heard anything." He voiced his frustration that the Government's website advertised a shortage in the field of engineering and that Canada was seeking engineers in various sectors, but immigrant professionals are unable to find work:

> If the government needs … engineers, they should come out with a plan so that the person does not suddenly find himself in the middle of an ocean. … Like the government can give incentives to businesses. …For example, if you hire an immigrant engineer, you will get a rebate tax.

He also remarked that employers do not need to pay $100,000 per year to engineers who are migrating to Canada with 15-20 years' experience; instead they could pay them less such that they could get the experience. Sakamoto et al., (2010) found that some of the immigrants they surveyed who had acquired Canadian experience did so through paid work, volunteering, mentoring, internships and/or co-op programs which was very helpful in them eventually obtaining professional jobs within their fields.

John had similar suggestions: "I think the Canadian government should do something to help immigrants get the Canadian experience that employers are looking for. … I don't know how they can do it, maybe provide internships or provide ways for immigrants to do volunteer work." He further went on to say that as an immigrant he would be more than happy upon his arrival to participate in some volunteer or apprentice

type work to get the Canadian experience which seems to be a major requirement for employers. He felt that the Canadian government could somehow help with this transition, since Canada needs immigrant professionals from other countries. Girard and Bauder (2005) point out that "for decades the Canadian government has admitted large numbers of highly skilled immigrants to support the growth and competitiveness of the Canadian economy" (p. 1). Since there is a need for skilled immigrants, the Canadian government should implement programs that would assist these individuals to acquire the Canadian experience that will help them transition into the Canadian workplace.

Chapter Summary

This chapter discussed the overarching themes that are most relevant to the lived experiences of the immigrant engineering professionals who participated in this study. All three participants experienced in some way the financial challenges, problems with credential recognition, and barriers to suitable employment after arriving in Canada under the auspices of the federal skilled workers program.

These narrative themes represent the voices of immigrant professionals who were very eager to share their stories, as they now had an audience who would hear their voices and affirm their experiences. In short, the stories shared were relative to those who experienced them but they also shed some light on the plight of other immigrant professionals who are outside the scope of the current study. Ultimately, such narratives convey not only individuals' lived experiences but also underscore the commonalities that permeate all immigrant professionals' challenges in adapting to the Canadian workplace environment. Understanding such challenges will allow us to rectify any shortcomings in the system that impedes such individuals' quality of life.

CHAPTER FIVE: DISCUSSION AND CONCLUSIONS

The overarching reason for undertaking this research project was to gain insight into the issue of educational qualification without suitable employment. In utilizing the narratives of immigrant engineers, I was able to get a deeper understanding of some of the challenges that these professionals face in trying to find work in their field of training after migrating to Canada. Having witnessed a large number of job applicants apply for positions that are below their level of education and work experiences, I sought to identify the driving force behind this seemingly overqualified population's need to work in these types of jobs. I thus embarked upon a journey of narrative research to investigate the factors that affected these qualified professionals' ability to located jobs within their field of expertise.

In interviewing these qualified professionals, I was able to unearth some of their challenges and identify barriers that they faced in their pursuit of suitable employment. When analyzing the five themes that emerged from this research that were discussed in the previous chapter, various commonalties are present that aligned with the literature review that spoke to the issue of educational qualification without suitable employment. Ultimately, an ongoing tension exists between qualified engineering professionals and the various credentialing institutions and employers who fail to recognize foreign-trained workers due to existing barriers that exclude these workers from jobs within their field of training. As Guo (2010) points out, educated immigrants have to face several barriers to get their credentials recognized by regulatory bodies and this continues to be an obstacle for these professionals in gaining access to professional jobs within their field.

The notion of marginalization and exclusion can be seen as a means that prevented these foreign trained professionals from ever gaining access to jobs for which they have gained both educational qualifications and work experience prior to migrating to Canada. Some employers' unwillingness to hire new immigrants within their workforce was also apparent due to the fact that they are seeking candidates with Canadian experience and Canadian education, which in itself excludes new immigrants from some of these jobs. I can agree with Li (2001) who suggests that immigrants may be discriminated in the job market based on race and culture. Bauder (2003b) found that "many interviewees believe that the marginalization of immigrants in the Canadian labour market is a systematic effort to reserve the upper segments of the labour market for Canadian-born workers" (p. 708).

This can be seen in John's story that explained how he was often told that he had an accent, and Peter's comments about the company whose advertisements specifically asked for local grads. Foreign-trained professionals are facing a major issue in gaining access to jobs within the Canadian society and often must downgrade their skills in an attempt to gain some entry-level positions within companies, with the hopes that an opportunity will arise in the future.

Even after getting his credentials recognized and attaining the P.Eng designation, Peter did not work as an engineer. Although John found work as a junior engineer even with his PhD in engineering, the level of compensation was well below the level of his counterparts who performed the same function. Chui and Zietsma (2003) found that the financial earnings of immigrants, even though they have been accredited by the Canadian education system, fell short of those of their counterparts. McIsaac (2003) points out that

there is a gap in how far new immigrants can advance in their career of choice, although Canadian government policies welcome new immigrants with high educational qualifications and experience. The three participants' stories echo McIsaac's statement because they all have educational qualifications that were initially recognized by the Canadian government during the immigration process though entry into their career of choice remains elusive. John's reflection on how well Canada is advertised abroad is also significant, as advertisements targeted to immigrant professionals claim that Canada needs skilled workers. Peter was very vocal on this issue and wanted to know where these jobs are that are being advertised which encourage skilled workers to migrate to Canada. He remarked that he is still searching for such jobs and therefore questions how there can be a shortage of skilled engineers as announced on the Canadian immigration website. As noted on the Canadian Immigration website, "Canada needs to select immigrants who are ready, willing and able to fully integrate into Canada's labour market and fill gaps in our economy, particularly where we have existing skills shortages" (Citizenship and Immigration Canada, 2012c, p. 2).

The related literature and the participants' narratives showed some common threads throughout this qualitative research process. Some of the points Guo (2010) discussed regarding barriers to labour-market access were evident in the participants' narratives as documented above. Additionally, Bauder (2003a) also echoed the fact that the rigorous certification processes that are in place disadvantage immigrants. Both the literature and the participant narratives showed that there needs to be more emphasis on ensuring that foreign-trained professionals can find a means of accessing the Canadian workplace, perhaps by creating apprenticeship programs that are geared towards helping

immigrants gain Canadian experience. As Spencer (2010) posits, workplace learning can be beneficial to the employer by creating a more skilled and efficient working environment as workers become more valuable human resources. If these educated immigrant professionals are exposed to workplace learning environments, they will have an opportunity to participate more readily to jobs that will require the Canadian experience. Doing so may increase employers' confidence in these new immigrants as the latter already would have had an opportunity to "learn the ropes" within the Canadian job market.

As Girard and Bauder (2005) noted, immigrants upon landing in Canada find out that accessing professional fields is contingent on their eligibility for employment in professions that are highly regulated. Additionally, immigrant professionals found that their educational qualifications and experience must be accredited by credentialing bodies that almost by default discount these immigrant professionals' experience as inadequate, unacceptable, or inferior to that of their Canadian counterparts (Goldberg, 2000). This was one of the major obstacles that these immigrant professionals felt prevented or delayed their progress of attaining suitable employment in their field of training. As noted earlier, the participants in this study had studied for a number of years to get their educational qualifications, but they found out very quickly after migrating to Canada that these educational qualifications had no merit in the job market or sometimes were not of equal value to the Canadian education system. There is a great need for change in helping these professional immigrants have better access to Canadian experience and validation of their credentials which could translate into Canadian education, as many are feeling a

sense of despair and sometimes feel marginalized when they realize that they do not have access to professional jobs which they believe they are highly qualified to meet.

Implications

The findings of this research may help address shortcomings within the Canadian immigration system as well as the licensing bodies that regulate certain professions, and may assist immigrant professionals who migrate to Canada and need to work within the context of these systems. My hope is that the telling of the stories and experiences of these immigrant professionals will bring a greater awareness of the issue of educational qualification without suitable employment.

The immigrant professionals' financial challenges were a result of their inability to find suitable work and having to resort to survival jobs. Most of those who migrated to Canada had enough money that would sustain them for several months to a year as they searched for suitable employment. Financial hardship is created when these professionals find out that their experiences and educational achievement are not recognized and they have to decide if they should invest already scant resources in further education. John recalled the tough decision that he had to make in returning to college to get a diploma that would satisfy the Canadian educational requirement that most employers were seeking. John ultimately felt that this was a waste of money, as he has not since used the diploma in any of his working environments, but it was necessary to seek out this Canadian education. All three participants' narratives reflected that they struggled financially and this was largely due to the fact that they could not find jobs within their field. Even after accepting survival jobs, they find it difficult to meet their financial obligations.

Because these professionals' credentials and work experience were deemed inferior to their Canadian counterparts, the only way they could meet their financial obligations and to support their families was to accept low-paying jobs. Ogbuagu (2012) argues that some highly educated, highly skilled professional immigrants are forced into low-wage, career-devoid, so-called McJob occupations due to the discounting of their prior education and experience. Even after living in Canada for several years, these immigrant professionals still face financial challenges due to the lack of access to better-paying jobs, and many cannot return to school as the household income is just enough to sustain their families. In telling her story, Sasha remarked that she could not return to school as she had financial issues and it would be difficult for her to return to school because she had a young child to take care of. More in-depth research into this issue may be warranted at a future date, to identify why immigrant professionals continue to migrate to Canada, despite hearing stories from families and friends about the challenges and financial hardships that they face when migrating to Canada.

According to Ogbuagu (2002), the Canadian government in its drive to be economically competitive continuously seeks out skilled immigrants through aggressive immigration policies that are designed to attract highly qualified skilled professionals. In principle this policy is aimed at alluring the prospective immigrants with the promise of a better life and the potential of being a successful contributor to the economy and a multicultural society. These policies deliberately attract skilled immigrants, but as Ogbuagu continues, immigrant professionals are not told that their accents and diction may be a barrier to them accessing the Canadian labour market. Foreign accents and the belief that some immigrant professionals do not have a good command of the English

language sometimes marginalize and exclude these professional immigrants from the upper segments of the job market.

All of the immigrants felt that this was an unfair practice, but felt powerless and sometimes too intimidated to speak freely about how their accents might be a reason for not acquiring gainful employment in their field of training. A requirement of the immigration policy is that the immigrant professional must to be fluent in one of Canada's official language, but despite having met these criteria, the participants in this study were still being marginalized and excluded due to their very noticeable foreign accent. Creese and Wiebe (2012) argue that "employers' perceptions of language fluency mediated through accents posed another barrier for those seeking white collar jobs" (p. 67). Creese and Wiebe further state that the "failure to recognize foreign credentials, demands for Canadian experience, and preferences for local accents were redefined as aspects of racialized discrimination" (p. 67). Based on the participants' narratives, we can see that this form of discrimination leads to marginalization and exclusion of the immigrant professional.

Despite demonstrating his proficiency in the English Language test, Peter had several encounters in which he felt that he was often overlooked, or when employers sometimes would discreetly make comments towards his language proficiency and a need to improve his speaking skills. Peter spoke of his optimistic approach in finding general work after realizing that his educational qualifications and work experience would not allow him to get a job with the local airlines, a field in which he worked in his native Bangladesh. He believed that he was not being treated fairly and his general feelings were that some employers were not being honest when he applied for certain jobs. He felt

that some were discourteous when he applied to positions that were below his educational qualifications. His accent may have proved to be a barrier even for low-wage paying jobs, despite the fact that very little experience and knowledge is required to work in such industries. Vargas (1998) stated that people believe in fairness and claim that we live in a fair and just system such that it does not matter who you are or where you are from—there is a sense of fairness for all. This fairness could not be identified in the participants' stories that are presented in this study. Rather, the sheer frustration was clearly seen as the immigrant professionals voiced their sense of hopelessness in ever achieving the recognition needed to work within the sector for which they have been trained.

Another implication that emerged from this research concerns the Canadian immigration policy for those who apply under the federal skilled workers program. The Canadian government explicitly advertises abroad to encourage skilled immigrants to migrate to Canada under this federal program, with an aim to attract the brightest and best to migrate to Canada. These immigrants often uproot themselves and their families hoping to make a better life and contribute to Canadian society by looking for jobs within their field of training and to continue the work that they left in their native countries. Having realized that they are unable to find work within their field due to the lack of Canadian experience and the lack of Canadian education demanded by employers some will return to Canadian institutions to get this Canadian education while others accept some form of survival jobs such that they can support their families. Even after some have attained the Canadian education, they are often shut out from working in the industries for which they went back for retraining. If these well-educated immigrants are left with no choice but to accept low-paying jobs, the result is clearly a waste of human

capital. As Creese and Wiebe (2012) ponder, "if the Canadian economy has unmet demand for low-skilled workers, and not for highly skilled workers, why place recruitment emphasis on educated workers who will not have a chance to use their skills in Canada?" (p. 70). Clearly, a thorough review of these policies is needed so that these professionals can be matched to the appropriate industries for which they have the knowledge and experience to continue their professions.

The role of the government in helping these immigrant professionals is yet another implication that needs to be addressed. While government programs are in place (through various agencies) to help these professionals assimilate within the Canadian society, far more government involvement is needed. The benefits to the Canadian economy will be considerable if the government can help these immigrant professionals find suitable employment within their field of training. From the literature review, Boyd and Thomas (2001) suggest that Canada along with the United States is one of the leading countries in which engineering based services are being exported. Implementing programs that will assist immigrants to fully practice in the field of engineering will eliminate the need to import these services from abroad. The implementation of mentorship programs on a wide scale that quickly screens immigrant professionals and assigns them to various employers will allow them to gain Canadian experience that in turn would benefit the immigrant professional and the Canadian government alike. Such programs might allow these individuals to work alongside trained professionals in lower-paying apprenticeship type roles or provide grants to employers that take on these new immigrants within the workforce.

While one can argue that the government should not give "hand-outs" to these

immigrants by way of subsidized employment, the flip side would be far worse for the Canadian economy if immigrants who are unable to find work fall into the social system. Ogbuagu (2012) in his recommendations for foreign trained professionals suggests that the government could employ internships, mentoring, and national standards initiatives to address the issues faced by the marginalized ethnic professional migrant. Such strategies would provide a sustainable way for the immigrant professional to obtain the requisite Canadian experience by forging networks while working alongside other professionals, thus strengthening their English language skills, including their accents and diction. The involvement of the government is necessary to stop the "brain drain" and the squandering of human capital by utilizing the knowledge-base of these immigrant professionals to help move them along with the Canadian economy.

Limitations

There were a few limitations to this research such as sample size, participants' ability to recall their experiences, and researcher subjectivity. The sample size consisted of only three participants and despite the fact that this is a narrative study, it limited the results as the participant sample did not cover the diversity of the immigrant population in Canada. The degree to which the issue of educational qualification without suitable employment affects several immigrant nationals may differ from country of origin.

The second limitation was the participants' memories. All of the participants have resided in Canada for more than 5 years and although those who have settled for greater than 10 years could recall their lived experiences with some level of familiarity, some details of their experiences could not be recalled accurately. Sasha indicated that she could not recall all the details of her experience during her earlier months living in

Canada, but was able to recall sufficient information as I collected her story. The number of jobs that she had applied for during her earlier months was once such information that she could not readily recall. The other issue for these participants with longer tenure in Canada was the fact that some of the immigration programs and policies have been revised since then and the names of organizations or federal skilled workers programs may have been updated since then. Some of the individuals' recollection of some of the events and experiences might not entirely reflect their true experiences. The negative experiences, however, had stained their memories, and they could recall with ease these experiences, thus providing accurate accounts of what they had encountered during their transitional phases.

The final limitation corresponds to researcher subjectivity. The issue of educational qualification without suitable employment is of great concern to me, as I have seen a great number of applicants with high educational attainment apply for jobs as assemblers within the organization in which I work. Some of these individuals have engineering degrees from foreign institutions, yet are unable to find work in their field of training.

While listening to the participants as they told their stories of their experiences to find suitable work, I could see many similarities with those who I am acquainted with who have gone through and are still going through the issue of educational qualification without suitable employment. The temptation was there to fill in the gaps as they responded to the questions and elaborate with their responses sharing their individual experiences in their own words. The narratives of the participants are very important to this research, and allowing their voices to be heard while I captured their story was

essential to the overall outcome of this project. I had to remind myself to listen to each person's story without drawing my own conclusions.

During the interview process, I had to be aware of the fact that I could not predict the outcome of each individual with similar experience to those who I know have experienced the issue of educational qualification without suitable employment. Each individual had a story to tell and although there were similarities, each had a unique experience which has left indelible impressions upon them. Being a visible minority myself, although I empathized with the experiences of each of the participants, I had to remove my personal subjectivity when engaging in the interview process such that the information presented was free of coercion on my part. The research cannot be compromised in any way and by acknowledging my personal subjectivity; I was able to hear about the lived experiences of these immigrant professionals.

Recommendations for Future Research

The Canadian government has taken some major steps in opening its doors to immigrant professionals from all over the world. While access to Canadian immigration for some countries occurred only after the inception of the Multicultural Act discussed earlier, a major obstacle has been overcome by allowing these foreign nationals to enter the country as skilled immigrants. While there are continuous efforts made by settlement agencies to help newcomers to Canada gain access to housing and transition themselves within the Canadian economy, they are still limited in their ability to help the immigrant professional find jobs in their field of training. A more in-depth look at the Canadian government's role in attracting immigrant professionals is needed, one that would help to explain the rationale behind the government's effort to solicit skilled immigrants from

abroad even though these professionals are unable to find work in their field of training. Future research is needed to accurately determine which sectors of the economy are under-represented by professionals in order to ascertain the need to import immigrant professionals to fill the gaps that exist in these areas.

Expanding the sample size in future research may allow a greater interpretation of the issues faced by the immigrant professional. There were only three participants selected for this research, two of them were in their 50s while the other was in his 30s. Some had lived in Canada for several years, and their experiences may be different than those of newer immigrant professionals arriving in Canada today. It would be interesting to see if immigrants who arrived in the past 3 to 4 years have fared better than those who participated in this study.

I would also like to recommend a study into immigrant professionals' mental health in assessing how educational qualification without suitable employment has affected their well-being. Some immigrant professionals held rather prestigious jobs prior to coming to Canada, and the realization that some have to be subjugated to menial work may have affected their emotional well-being. Dean and Wilson (2009) found immigrant professionals who were underemployed or unemployed had experienced some mental health issues, namely depression, anxiety, stress, unhappiness, tension, worry, irritation, and frustration, and these were all linked to their inability to find suitable work.

John spoke of how he was overcome by stress due to his inability to find work within his field. He mentioned that he had sleepless nights and often wondered if his level of anxiety would ever dissipate as he had many unsuccessful attempts to find suitable employment. Peter spoke briefly of the level of stress that he faced in seeking the

appropriate qualification and the obstacles he encountered, however due to his optimistic nature, he always tries to remain positive in his pursuit. Sasha on the other hand, did not have the same level of stress that was reported by John, since her husband was the major breadwinner while she was looking for work; there was some financial support that was present that would allow them to survive. The internal battles resided within her, as she often felt that her worth was limited by the jobs that she took as a means of helping to sustain the family. Immigrant professionals who are migrating to Canada do so under the premise that they are coming to Canada for a better life, while the stark reality may be the opposite. The reality of not being able to find a job in their field of training presents many challenges for these professionals, who must now refocus their energies and adjust their way of thinking in an attempt not only to thrive but more often to merely survive.

Concluding Thoughts

My intentions when I embarked upon this study were to get a greater understanding of the issue of educational qualification without suitable employment. Since this has been a pressing issue for me based on my personal encounters with individuals in the field of engineering, I sought to examine this phenomena though the narrative research lens to get a more in-depth look at the bigger picture. As I navigated my way through the lived experiences of these immigrant professionals, I had the opportunity to see firsthand the realities of these individuals that deepened my understanding of the issue. I was able to explore the issue of marginalization and exclusion of these professionals as they seek employment in their field of training. Several factors contributed to the marginalization of these individuals as they seek to find work, and these undoubtedly have affected the way in which they see themselves. The

actions of a Canadian government that solicits professional immigrants without subsequently helping the latter gain the Canadian experience sought by employers only adds to the burden that these individuals face. Ogbuagu (2012) suggests that hidden and systemic racist discourses prevalent amongst those with economic clout summarily discount foreign credentials of immigrant professionals. By exploring these issues, I have gained a greater understanding of the challenges faced by many immigrant professionals and although I have been enlightened by this discovery, my initial analysis of the issue which was evident through the research has been substantiated.

While it is not expected that accreditation bodies should readily accredit everyone who arrives with an engineering degree (due to fraud from bogus institutions), those who pass the litmus test for engineers should be given an opportunity to exercise their skills either through apprenticeship or comparable bridge programs. The barriers that exist for immigrant professionals continue to hinder the progression and the actualizing of their dreams of ever being able to work within their professions within the Canadian job market. I have highlighted some of these barriers and although some are discriminatory by nature, they also inflict unfair and unreasonable treatment on the immigrant professional.

The benefits to the Canadian economy to assist these professionals by accrediting them and generating means by which these individuals can acquire the Canadian experience required by Canadian employers is greater than the employable skills that accompanies these professionals. Population projections estimate that death rates will exceed birth rates in Canada by the year 2030, and thus immigration will be the sole contributing factor to population growth (Hiebert, 2005; Statistics Canada, 2001, 2006).

Canada has made the right steps with its immigration policy of attracting the brightest and best to help grow and sustain the economy. However, the continued devaluing of these immigrant professionals' foreign credentials will perpetuate the construction of walls that the immigrant professional may never be able to scale.

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Appendix A

Points System Chart for Skilled Worker (Independent)

EDUCATION	SCORE
PhD or Master's and at least 17 years of full-time equivalent study	25
PhD or Master's and less than 17 years of full-time study	22
Two or more university degrees at the bachelor's level and at least 15 years of full-time equivalent study	22
Two to four-year university degree and at least 14 years of full time equivalent study	20
One-year university degree and at least 13 years of full-time equivalent study	15
Three-year diploma, trade certificate of apprenticeship and at least 15 years of full-time equivalent study	22
Two-year diploma, trade certificate of apprenticeship and at least 14 years of full-time equivalent study	20
One-year diploma, trade certificate of apprenticeship and at least 13 years of full-time equivalent study	15
One-year diploma, trade certificate of apprenticeship and at least 12 years of full-time equivalent study	12
Secondary School Educational Credential	5
	25 (Max)
LANGUAGE	
First Language per ability (Speaking, Listening, Reading, and Writing)	
High proficiency (per ability): IELTS 7.0-9.0	4
Moderate proficiency (per ability): IELTS 5.0-6.9	2
Basic proficiency (per ability): IELTS 4.0-4.9	1 (max 2)
No proficiency: IELTS less than 4.0	0
	16 (max)
Second Language per ability (Speaking, Listening, Reading, and Writing)	
High proficiency (per ability): TEF level 5-6	2
Moderate proficiency (per ability): TEF level 4	2
Basic proficiency (per ability): TEF level 3	1 (max 2)
No proficiency: TEF level 0-2	0
	8 (max)
EXPERIENCE	
One year	15
Two years	17
Three years	19
Four years	21
	21 (max)
AGE	
21 to 49 years old	10
Less 2 points for each year over 49 years old or under 21 years old	**10 (max)**
ARRANGED EMPLOYMENT IN CANADA	
HRSDC, NAFTA, CCFTA, GATS, Postgraduate work permit, or Arranged Employment Opinion (AEO)	10
	10 (max)
ADAPTABILITY	
Educational credentials for a spouse/common-law partner	
a spouse/common-law partner who would be awarded 25 points	5

a spouse/common-law partner who would be awarded 20 or 22 points	4
a spouse/common-law partner who would be awarded 12 or 15 points	3
Minimum one year of full-time authorized work in Canada	5
Minimum two years of full-time authorized post-secondary study in Canada	5
Points received under the Arranged Employment Factor	5
Family relationship in Canada	5
	10 (max)
The current passing points is 67 points out of 100 points	

Extracted from Border Connections

Appendix B

Interview Guide

The following questions were used to conduct this qualitative research:

1. What are some of the reasons that influenced your decision to leave your country of birth?

2. Describe your experience(s) relocating to Canada?

3. Describe some of your experiences working as an engineer in your home country.

4. Why did you choose to move to here?

5. What are your experiences with searching for work?

6. Describe your general feelings about the interviews that you have attended so far?

7. Did a company provide reasons why you were not the successful candidate during or after an application/interview process? Please explain.

8. In your opinion, what are some of the factors that you believe have prevented you from receiving a job within your field?

9. Describe your expectation of credentials validation upon entering Canada to work in your field of training.

10. After realizing there is a credentials validation process, how was your experience when trying to validate them through the regulatory body?