Career Decision of Recent First-generation Postsecondary Graduates at a Metropolitan Region in Canada: A Social Cognitive Career Theory Approach

Dr. Luis Miguel Dos Santos

Woosong Language Institution, Woosong University, Daejeon City, South Korea

Using social cognitive career theory by Lent, Brown and Hackett (1994), this research analyzed recent first-generation postsecondary graduates' career perspectives and the difficulties of being first-generation graduates. The researcher found that recent first-generation postsecondary graduates in a Canadian metropolitan model their career pathway and decisions after peers with similar experiences. Also, the professional suggestions from parents were not available for both academic and career planning. This finding suggested career counselors should not only suggest career pathways to students based on their characteristics, but they should also connect their overall personal characteristics and academic majors. Earlier studies showed that students' childhood and teenage experiences could influence their outcome expectations for career selection.

S'appuyant sur la théorie cognitive-sociale de l'orientation professionnelle de Lent, Brown et Hackett (1994), cette recherche a analysé les perspectives de carrière d'étudiants ayant récemment obtenu un diplôme postsecondaire ainsi que les difficultés liées au fait d'être la première génération de diplômés du postsecondaire. Le chercheur a trouvé que les membres de la première génération de diplômés récents du postsecondaire dans une métropole canadienne orientent leur cheminement et leurs décisions professionnelles sur ceux de leurs pairs avec des expériences similaires. Il a également noté l'absence de suggestions de la part des parents relatives à la planification académique et professionnelle. Ces résultats portent à croire que les conseillers en orientation ne devraient pas se limiter à proposer des cheminements professionnels basés sur les traits des étudiants, mais devraient également tenir compte de leurs traits de caractère et de leurs spécialisation académique. Des études antérieures ont démontré que les expériences que vivent les étudiants pendant leur enfance et adolescence peuvent influencer leurs attentes de résultats quant au choix de carrière.

At present, Canada is experiencing an unprecedented shortage of professional workforce in all industry types. First-generation students refer to students' parents who do not hold a university qualification (Engel & Tinto, 2008). Both the Canadian and American governments acknowledge first-generation students as a unique group that requires attention. Regarding the employability or employment issues of university graduates, first-generation university graduates are usually categorized as disadvantaged people. According to the National

Household Survey 2011, 75.3% of the Canadian population was employed in that year. Within this group, 30.8% held a university qualification, and 12.7% did not have university qualifications. Many vocational developmental studies have been carried out in this area of study. The topics of work and career in Canada are widely discussed. Blue-collar industries, which have traditionally employed workers without a university qualification, are in a state of decline. By contrast, the number of positions in the service industries has increased rapidly. Currently, 11.5% of the total employment is in the retail trade sector, which accounts for 1,907,605 positions. In 2011, the sector of health care and social assistance accounted for 11.4% of the total employment, taking up 1,886,980 positions.

First-generation students and university graduates usually come from working-class families for whom income is a vital concern. Race and ethnicity could factor in as well (Thomas & Quinn, 2007). In their investigation of first-generation students in 10 different countries, Thomas and Quinn (2007) found that first-generation students are usually from working-class families. The report concluded that parents' educational and occupational background could greatly affect the educational decision of students, including the choice to obtain postsecondary education. For example, students from working-class families are less likely than students from middle-class families to attend postsecondary education.

Several factors could influence secondary school students to understand their social status (Pascarella et al., 2004). These factors include ethnic group, race, family economic status, mathematic ability, critical thinking skill, academic motivation, educational goal, and first-generation status. First-generation status is the most important factor affecting academic attainment level and economic status of secondary school students.

Based on Pascarella et al.'s (2004) finding, Thomas and Quinn (2007) argued that first-generation students should also be categorized as an individual group rather than just as a financially disadvantaged group. A financially disadvantaged group includes people with different disadvantages, such as a single-parent family, identifying the first generation as an individual group that requires unique attention is important.

In terms of the educational experience of first-generation students in Canada, Finnie et al. (2010) revealed no significant differences between non-first-generation students and first-generation students in postsecondary education experience. The study investigated single dependent students who entered postsecondary education for their first time and whose parental incomes were below the National Child Benefit line. The study required the participants to be residents of Newfoundland and Labrador, Nova Scotia, New Brunswick, Ontario, Manitoba, or British Columbia. The study argued that students' family incomes are not necessary connected to parents' educational levels. This shows that family income may not strongly influence the career decision making of recent first-generation graduates.

Social cognitive career theory (SCCT) posits that individuals develop their career goals within a sociocultural environment that is influenced by the opportunity structure, such as educational opportunity, socioeconomic background, and social supports (Lent, & Brown, 1996). SCCT is a leading theory on career perspective that discusses the ways people understand their career interests, set their goals, and persist in the working environment. The present study aims to examine the socio-environmental supports and barriers affecting the career selection behaviors of first-generation postsecondary graduates in Ontario, Canada.

First-generation students may have distinct ideas and perspectives of planning their career path and educational decision (Lent, Brown, & Hackett, 2000). They also adopt unique types of support to overcome their difficulties caused by environmental factors. First-generation

postsecondary students encapsulate an important group of postsecondary enrollment, but no significant studies have been conducted on these students' career development. About 17% of the 2 million-student population enrolled at a Canadian postsecondary institution were first-generation students in the 2011–2012 academic year. To obtain a holistic viewpoint that can capture sociocultural elements, researchers should have a thorough understanding of how this group of first-generation students from a disadvantaged socioeconomic background make their career choice and select their support.

The remainder of the paper is organized as follows. The theoretical framework of this study, which is based on Lent, Brown, and Hackett's (1994) SCCT, is discussed. Then, the methodology, findings, and discussion are presented. The final part provides the conclusion and future implications for equitable career supports for first-generation students. The following research questions guide this study:

1. How do recent first-generation postsecondary graduates explain the process of accessing the postgraduate working environment?

2. What lived experiences affected recent first-generation postsecondary graduates after they completed their postsecondary education?

Theoretical Framework

SCCT extended Bandura's social cognitive theory (1986) to include the career behavior selection process (Lent et al., 1994). SCCT presents the learning models and cognitive behaviors assisting individuals to develop "(a) the formation and elaboration of career-related interests, (b) selection of academic and career choice options, and (c) performance and persistence in educational and occupational pursuits" (p.79). Significantly, SCCT categorizes the differences between intentions (personal beliefs and goals) and behaviors (exercises and actions) as individuals tend to act what they believe. As people continue to perform success-oriented actions, their interests and self-efficacy are encouraged, and the opportunity to achieve their goals increases. SCCT is a supportive theory not only for theorizing the career selection behaviors and development of first-generation students but also for comprehending their experience and behaviors in postsecondary institutions. SCCT includes such elements as the influence of family members, friends, teachers, peers, and counselors on the self-efficacy, interests, and goals of first-generation students (Lent et al., 1994).

According to SCCT, cultural, social, and economic elements can affect people's self-knowledge and opportunity outcomes (Lent et al., 1994). An individual's movement can be affected by unsupportive and discouraging environmental elements. For example, Asian-Canadian students in a limited resource secondary school may be subjected to negative learning experiences, thus constraining them from obtaining potentially beneficial opportunities. Moreover, students in Northern Quebec with limited access to other occupational options may have restrained contact with people from other working environments (Lent et al., 1994). Environmental influence has two core types: (1) background influence forming goals, self-efficacy beliefs, interests, and expectations, and (2) personal influence affecting one's career selection immediately. Background influence can be classified as residential location, age, gender, and skin color, among others. Personal influence can be classified as the conversation with peers and individuals from other working professions.

SCCT has been adopted to comprehend the career selection behaviors of women (Chronister

& McWhirter, 2003; Flores & O'Brien, 2002; Hackett & Byars, 1996). Moreover, it has been used to examine the career selection behaviors of secondary school students (Ali & Saunders, 2006; Lent, Paixão, da Silva, & Leitão, 2010; Navarro, Flores, & Worthington, 2007). However, no study has yet been conducted on the current direction of the career selection behaviors of first-generation students.

Methodology

This qualitative study examines the challenges and support affecting the career selection behaviors of first-generation postsecondary school students in Canada.

Site

The study context is Toronto, the most populous metropolitan city in Ontario, Canada. This city had a population of 2,615,060 in 2011. It attracts a great number of Canadians from other provinces and territories, overseas workers and immigrants, and international students because it provides many employment opportunities. Following White, the Asian population is the second largest ethnicity group in the city. The Canadian government has no statistics on the languages spoken in the city. However, the report revealed more than 1 million residents spoke a first language other than English in 2001 (Toronto Police Service, 2013). Toronto is a multicultural city where people from different countries reside. As of 2016, Toronto has eight postsecondary institutions, four of which are universities and the other four are colleges. In 2008, these postsecondary institutions enrolled about 200,000 students.

Data Collection

This study adopted the semi-structured interview; this qualitative approach provides potential readers with an in-depth description of the phenomenon's main factors and how the participants experienced these factors (Merriam, 2007). Interviews are a common data collection approach in qualitative research (Merriam, 2009). Qualitative research in the social science field has a distinct interview process to collect information (Seidman, 1991). Conducting personal interviews enabled the researcher to understand the participants' (a) formation and elaboration of career-related interests, (b) selection of academic and career choice options, and (c) performance and persistence in educational and occupational pursuits (Lent, et al., 1994, p.79).

The researcher conducted two semi-structured, face-to-face interviews to accomplish these objectives. Each interview lasted 60–90 minutes. After the analysis, all the participants were invited to a follow-up member checking interview for triangulation.

Seidman's (1991) phenomenological interview framework was used to gather interview data. Although Seidman's (1991, 2006) framework has three phases, the researcher combined the first two phases into a single one and conducted the third phase separately by the requirements of this study (Seidman, 2006). The combined interview is labeled as the first-stage interview. The participants were interviewed at the beginning of the study. Afterward, they were invited to a second-stage interview four months after the first-stage interview. Two interviews were conducted because the researcher needed to collect the changing experience from the beginning of the research and how and why the experience changed four months after the first-stage

interview. The two interview themes adapted the direction of Seidman (1991). The first-stage interview established the context of the participants' experience and enabled the participants to reconstruct the details of their experiences within the context in which they occur. The second-stage interview enabled the participants to look back on the meaning of their experience to them (Seidman, 2013).

Participants

Five participants were invited to join the study, namely, three Asian-Canadian women, one Hispanic-Canadian woman, and one White-Canadian man, who are all first-generation postsecondary graduates in Toronto aged 22–24. As the research conducted two in-depth interview sections per individual, 10 in-depth interview-sections were collected. As each participant shared a lot of meaningful lived experience and perspective, the data of this research was rich and meaningful to respond and answer the research questions of this study. To obtain in-depth data, the participants should meet the following criteria:

1. First-generation status

2. Completed a university qualification in a Toronto-based postsecondary institution within one year

3. Employed in a Toronto-based company

4. Employed in a post-graduate position that requires a university qualification

The breakdown of academic majors is as follows: (1) nursing, (2) business management, (3) journalism, (4) biology, and (5) engineering. Table 1 presents the participants' demographic data. All names are pseudonyms.

Data Analysis

The open coding strategy (Merriam, 2009) or the first-level coding procedure (Saldaña, 2013) was used so that the initial themes could be developed and represented according to the participants 'own words. Data must be reduced further (Thomas, 2006). Therefore, axial coding was employed to reduce the data and develop a second-level coding analysis (Saldaña, 2013;

Table 1.

Participants' Demographic

Name	Age	Academic Major	Language Spoken	Ethnicity	Work Experience Before Graduation	Work Position(Beginning)	Work Position (4 months later)
Amy	22	Nursing	English, Thai	Asian	Summer internship in a hospital	Nurse	Nurse
Betty	23	Management	English, Cantonese	Asian	5 months as a part-time saleslady	Retail associate	Retail associate
Cindy	22	Journalism	English, Cantonese	Asian	6 months as a part-time receptionist	Reporter trainee	Reporter trainee
Doris	22	Biology	English, Spanish	Hispanic	Summer internship in botany	Worker in an NGO	Lab assistant
Edward	24	Engineering	English, French	White	6 years in a repair garage	Retail associate	Lab assistant

Thomas, 2006). If many themes could still be found after data reduction using axial coding, the researcher would combine themes with similar meanings to obtain three to five themes at the end of the data analysis (Thomas, 2006). The findings illuminated the important elements according to SCCT (Lent et al., 1994).

Findings

Although the details of each participant's understanding were dissimilar, similar concepts important to the current study were found. Moreover, the results presented several core concepts reflecting how cultural, social, and economic elements could affect the opportunity outcomes and self-knowledge of individuals (Lent et al., 1994). The findings, as illustrated below, are classified into three themes: (1) vicarious experiences from others with similar situations, (2) outcome expectations, and (3) professional suggestions from career counselors based on the SCCT concepts (Lent et al., 1994). The findings were in accordance with SCCT's argument that cultural, social, and economic factors could affect the career decision of first-generation postsecondary graduates.

Vicarious Experiences from Others with Similar Situations

The concept of self-efficacy beliefs is adapted from Bandura's self-efficacy theory (1977; 1997). Bandura (1997) suggested that self-efficacy beliefs are strongly linked to the behaviors of human as "people's level of motivation, affective states, and actions are based more on what they believe than on what is objectively true" (p. 2). Therefore, the career decision of individuals may not necessarily be influenced by objective facts but by their personal understanding. Similarly, Lent et al. (1994) argued that personal performance accomplishments, vicarious experiences, social persuasion, and physiological and emotional states are the four primary factors affecting individuals' self-efficacy in the career decision.

All the five participants similarly reported that the similar situation of their friends or relatives is one of the main factors that contribute to their first full-time position. These recent first-generation postsecondary graduates believed that observing others' career pathway could serve as a model for them. According to Amy,

> My cousin is a nurse in a medical center in Scarborough. She has worked in that place more than ten years. I also completed an internship at that medical center. I like that place, and I like that working environment. I like working as a nurse.

Betty also stated a similar modeling idea about her cousin:

> My sister's husband works in a retail store as a retail manager. He completed his bachelor's degree while working full time. He absolutely encouraged me to work as hard as I could. I work as a saleslady in another chain store the same as his. I don't plan to leave this place as I want to become like my sister's husband. Yes, I want to become a retail manager soon.

Cindy explained her career decision as follows:

> The reason why I want to become a reporter is that of my brother. Before my brother moved from Hong Kong to Canada, he was a Chinese reporter for a newspaper press company in Hong Kong.

When I was young, he would always ask my sister and me to read Chinese newspapers and watch Chinese news on TV. Before I went to senior secondary school, he still worked for a local newspaper press in Chinatown. I think that interviewing someone is a very cool job.

Edward shared his experience with his father and how his family business influenced his own career decision:

I am originally from a rural town near Edmonton. My dad operates the only car repairing garage in town. When I was small, my father, my brother, and I would always stay in the garage for hours. I still remember when my dad asked me to climb up the car. Before I finished my university degree, every year, I went back to my town to help my daddy. My brother did not leave the town, so he continues to work with my dad.

These four participants expressed that their family members and relatives' careers and occupations significantly influenced their career decisions and even the selection of their university major. This finding echoes that of Lent et al. (1994): observing others' occupation selection serves as a model for the career decision of recent first-generation postsecondary graduates. Doris's situation is similar to that of other participants. However, she was not influenced by her family but by her friends:

I worked as a volunteer when I was 14. My mom usually brought my sister and me to a local community center for volunteering. During the summer holiday, the center would host a field trip to a plantation in Ottawa. We grabbed some apple seeds from the plantation and planted an apple tree in my backyard. That's why I am an environmentally friendly person. I wish to contribute my knowledge to help everyone in Canada to be concerned about the environment.

Outcome Expectations

SCCT argues that individuals react to the activities with which they are more likely to connect. More importantly, these activities can connect with their expected outcomes and results as well as their self-efficacy beliefs. Both Bandura (1977) and Lent et al. (1994) argued that if individuals believe that such behaviors would not lead to expected outcomes, the individuals would be less likely to conduct such actions. As mentioned in the self-efficacy section, individuals usually observe others' behaviors as their model. Thus, they expect their outcomes to be similar to those of their model as well. In the present study, all the participants reported that they observed others' behaviors as their model for their current career position.

Two of the participants changed their first full-time position four months after the first-stage interview because of a mismatch in their outcome expectations. Doris said,

I graduated from my university with honors. I am not saying that I cannot switch my career direction, but I am still searching for my career pathway. I certainly like working in a community center. The workers are very nice, and the patients are excellent as well. I have no complaints about this job for sure. But I can come back to work as a social service provider at any time in the future. But if I miss my early 20s without becoming a scientist, then I am not sure if I will be able to work as one again. Working in science has always been my dream. However, I cannot see myself in the science field if I continue to work in this community center. I switched jobs not because of the lovely workers in the center but because the job could not meet my expectations somehow. I am willing to change jobs

because of this reason … This is why I am now working in a lab. I am in my second week of employment. My feelings towards this work are excellent. I can see myself, and I can see my future in this lab.

Edward also left his previous position. Edward's reason for changing careers is similar to that of Doris.

The reason why I switched jobs is that of dislike. The salesman position is always concerned about money. I did not study much about business planning at my university. Just don't understand how to satisfy the customer star list, what the ROI is … Also, marketing is not my expertise. Going to the train station for marketing promotions is not my expectation as a salesman. After six weeks of working as a salesman, I decided to quit and find another job. As a junior electrical engineer, I would like to work in a lab. Not strictly in a lab, but perhaps in a computer factory or a place where science is involved. Business companies are more appropriate for others but not for me. If I cannot survive in Toronto, I can go back to my dad's garage. This is not the best plan, but I will be satisfied with what I can do with my dad.

Doris and Edward left their first jobs because of the mismatching of their outcome expectations. Both graduated with a science-related degree in different fields from their first jobs. According to Lent et al. (1994), if the expectations cannot be matched, the individuals are more likely to quit their position. As recent postsecondary graduates do not have much working experience, exploring different careers is not difficult to explain.

By contrast, Amy, Betty, and Cindy continued to work in their first full-time positions that are related to their academic majors at university period. These three participants were satisfied with their position and their outcome expectations. As Amy said,

I studied nursing at university; I work as a nurse. I can see the connection. If I did not like nursing, I would not have earned a degree in this major. My cousin also encourages me to continue in this career, which is my dream job. The department director even asked me in which department I would like to work. Isn't that exciting? I enjoy working in the pediatrics clinic; I worked there in my very first week. I take care of children. They are lovely. The clinical head is lovely. We are a family.

Betty was satisfied with her current position because her outcome expectations were completely matched.

I have to deal with customers from all over the globe. I like international customers who bring different expectations and feedback to our department. I cannot say that I love negative feedback, but I learned a lot about how to deal with negative customers. How to handle ad hoc problems as well as how to manage the roster. I applied my final-year thesis managerial problems to the workplace. I can see how theory and practice can be applied to a situation. I enjoy this job. I cannot quit this job. I even encourage my classmates to join us.

Cindy also expressed similar ideas as those of the other two participants:

I can't say I love my job as it is just a job. But I learn a lot of new skills at work. This position enables me to apply what I learned from university to the working environment. I am very fortunate in that I can speak both English and Cantonese. A large number of Toronto residents are from Southern China. I can serve the majority group of these Chinese residents in my office. I enjoy this position, and I don't

plan to leave soon, I guess. At least I can apply what I learned to my work.

The interviews of the three participants showed that outcome expectations are the way for recent postsecondary graduates to achieve their careers. According to Lent et al. (1994), unlike second-generation postsecondary graduates, first-generation postsecondary graduates usually need to explore their career paths without suggestions from their parents. The data support that the idea that the participants are more likely to continue their careers in such a direction if the outcome expectations match with what their beliefs. As Doris and Edward started their first jobs in unfamiliar fields, the outcome expectations were not achieved.

Professional Suggestions from Counselors and Teachers

As first-generation students usually do not receive professional suggestions about university major selection and career pathway, they rely highly on recommendations from others. Professional suggestions from counselors and teachers were collected during the interviews.

All of the participants recounted their experience with university major selection and career pathway decision from their counselors and teachers both at the secondary and university levels. Amy had a positive experience with her counselors and teachers while at university.

> I entered my university as general studies major. I did not know what to study because my parents did not go to university. When I was in secondary school, I was lost. I did not know who to ask. But when I completed my first semester at university, I shared my situation with my academic counselor, and she asked me if I wanted to try a nursing major. I asked my parents, and both agreed with that. I have two little brothers. They were at secondary school then, as they are still now. If I could work as a nurse, I could partially support their expenses. During my final year, I also consulted with my professors about the track of my internship. I can work in all divisions. But my professor is a pediatrician, so I work in that division now.

Betty had similar sentiments about her situation. "I went to the career service for a part-time position, and the counselor helped me to find a saleslady position. I still work here long after I graduated."

Cindy's first working position was a recommendation from her professor: "My professor is a Cantonese speaker as well. She wrote me a recommendation letter and even called the supervisor of the broadcast office. I am now on the Asian channel."

Both Doris and Edward listened to the suggestions of their counselors and teachers. However, the results were somehow unsatisfactory. According to Doris,

> I listened to my guidance counselor about university major selection during secondary school. I asked my dad, but he could not provide me much because he does not even have a secondary school diploma. I could only ask my counselor and my relatives about my university major. One semester away from my university graduation, I asked help from the career service office for a postgraduate position. The counselor suggested that I work in a community center, which I tried.

Edward expressed his experience with counselor and professors as follows:

> My dad works in a garage. He knows nothing about my school and career. I could not get suggestions from him. I went to university with this major because of my counselor at my secondary school. My

counselor said that Toronto is a city that is rich in diversity. The job opportunities are more than those in my hometown. I like science and math, so I selected double E. My classmates all worked in different fields other than science. So I asked my professor about my career direction. He said that a bachelor's degree was not enough to work with as an engineer and asked me to try other fields first.

All the participants expressed that their parents could not provide any suggestions about decisions related to university majors and career pathway decisions because of their status as first-generation graduates. They listened to their counselors, teachers, friends, and relatives as models. The results indicate that suggestions from counselors and teachers could be wrong. For second-generation graduates and middle-class children, their parents could serve as a model and adviser for their future decision.

Discussion and Conclusion

This study focused on how social, cultural, and economic elements could affect the opportunities, outcomes, and self-knowledge of first-generation postsecondary graduates in a metropolitan region in Canada. Family background is essential for adolescents to develop their career perspective (Watson & McMahon, 2005; Whiston & Keller, 2004). First-generation graduates do not usually receive suggestions and support from their parents, who did not receive formal postsecondary school education, as indicated by the data. None of the participants expressed that their parents played a role in their academic and career pathways. First-generation graduates usually rely on models who are in situations are similar to theirs (Lent et al., 1994). A report showed that social work students usually select social work as their career because of the influence of their positive experience and support from other social workers (Rompf & Royse, 1994). This result also echoes how other people with similar situations might have influenced the participants' career pathway in this study.

In this study, the researcher found that first-generation graduates usually take the successful career pathways of their relatives and close friends as a mirror of themselves. However, such modeling can be dangerous because each individual's academic and personal backgrounds are different. Several participants changed their first postgraduate positions because of the mismatching of their outcome expectations. Career counselors should not only suggest career pathway to students based on their personal characteristics but should also connect their overall personal characteristics and academic majors. Earlier studies showed that students' childhood and teenage experience could influence their outcome expectations for career selection (Hanson & McCullagh, 1995). This result suggests that when nursing graduates enter the workplace, their decision to enter which division could be influenced by their previous experience.

One of the most significant findings of this study was linked to the SCCT theoretical framework (Lent et al., 1994). The SCCT points out that individuals tend to select their career pathway based on cultural, social, and economic factors. In this current study, based on the data information from the participants, the researcher could indicate that the recent first-generation postsecondary graduates tend to be influenced by their social and personal experience from their peers, family members and related professionals in the industry. In short, the career decision of the targeted participants could be concluded in two notions. First, unlike the professionals with larger social networks and richer lived experience, recent graduates' networks tend to be their peers, family members, and professionals at schools. Before any full-time working experience in the industry, it would be more likely that recent graduates tend to select

the career and opportunities which they have encountered in their previous lived experience. Second, unlike professionals with family and financial resource concerns, recent graduates tend to select their career pathway based on their interests, previous experience, and opinions from others. These two findings also echo the theoretical direction of SCCT about the influence of cultural, social, and economic factors.

Recommendation for Future Research

In future studies, the sample size and depth should be expanded by examining the understanding of additional categories and demographics of the population, age, race, and immigration status. This expansion will enable a wider picture of the industry and the perspectives of the participants.

The participants' relationship with their models positively or negatively affected their personal beliefs in career pathway selection. In metropolitan regions where job opportunities are more abundant than those in rural communities, recent postsecondary graduates could switch their position based on their desire and career perception. However, during an economic collapse, opportunities are more likely to move away from suburban and rural communities. The economy could be the greatest consideration among the other elements.

The same type of research could also be conducted in a non-metropolitan region and other metropolitan regions in Canada. Canada is a large country where most of the population and job opportunities are located in greater Toronto, greater Vancouver, and greater Montreal. The findings of this study could be highly representative of the current situation in these metropolitan regions. However, for second-tier cities such as Halifax, Regina, Victoria, Windsor, and Winnipeg, the categories of job opportunities could be significantly fewer than those in metropolitan regions. Therefore, greater diversity may be obtained if the participants and data are effectively understood.

Last but not least, a large number of European cities, such as London, Paris, Munich, and Lisbon may have similar situations about the career development of recent first-generation postsecondary graduates. The current research design and methodology may provide a blueprint for researchers in these regions to understand their youth and human resource planning in their nation.

References

Ali, S. R., & Saunders, J. L. (2006). College expectations of rural Appalachian youth: An exploration of social cognitive career theory factors. *The Career development quarterly, 55*(1), 38-51. doi: 10.1002/j.2161-0045.2006.tb00003.x

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84*(2), 191-215. doi: 10.1037/0033-295X.84.2.191

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice Hall.

Chronister, K. M., & McWhirter, E. H. (2003). Applying social cognitive career theory to the empowerment of battered women. *Journal of Counseling and Development, 81*(4), 418. doi: 10.1002/j.1556-6678.2003.tb00268.x

Creswell, J. W. (2008). *Educational research: Planning, conducting and evaluating qualitative and quantitative research*. Boston, MA: Pearson.

Engel, J., & Tinto, V. (2008). *Moving beyond access: College success for low-income first-generation students*. Washington, D.C: The Pell Institute.

Finnie, R., Childs, S., & Wismer, A. (2010). *First Generation Post-Secondary Education Students*. (Version 02-24-10) A MESA Project L-SLIS Research Brief. Toronto, ON: Canadian Education Project. Retrieved from http://higheredstrategy.com/mesa/pub/pdf/First_Generation_02_24_10-1.pdf

Flores, L. Y., & O'Brien, K. M. (2002). The career development of Mexican American adolescent women: A test of social cognitive career theory. *Journal of Counseling Psychology, 49*(1), 14. doi: 10.1037//0022-0167.49.1.14

Hackett, G., & Byars, A. M. (1996). Social cognitive theory and the career development of African American women. *The Career Development Quarterly, 44*(4), 322-340. doi: 10.1002/j.2161-0045.1996.tb00449.x

Hanson, J. G., & McCullagh, J. G. (1995). Career choice factors for BSW students: A 10-year perspective. *Journal of Social Work Education, 31*(1), 28-37. doi: 10.1080/10437797.1995.10778836

Lent, R. W., Brown, S. D., & Hackett, G. (1994). Toward a unifying social cognitive theory of career and academic interest, choice, and performance. *Journal of Vocational Behavior, 45*(1), 79-122. doi: 10.1006/jvbe.1994.1027

Lent, R. W., & Brown, S. D. (1996). Social cognitive approach to career development: An overview. *The Career Development Quarterly, 44*(4), 310-321. doi: 10.1002/j.2161-00451996tb00448.x

Lent, R. W., Brown, S. D., & Hackett, G. (2000). Contextual supports and barriers to career choice: A social cognitive analysis. *Journal of Counseling Psychology, 47*(1), 36-49. doi: 10.1037//0022-0167.47.1.36

Lent, R. W., Paixão, M. P., da Silva, J. T., & Leitão, L. M. (2010). Predicting occupational interests and choice aspirations in Portuguese high school students: A test of social cognitive career theory. *Journal of Vocational Behavior, 76*(2), 244-251. doi: 10.1016/j.jvb.2009.10.001

Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation*. San Francisco, CA: Jossey-Bass.

Navarro, R. L., Flores, L. Y., & Worthington, R. L. (2007). Mexican American middle school students' goal intentions in mathematics and science: A test of social cognitive career theory. *Journal of Counseling Psychology, 54*(3), 320. doi: 10.1037/0022-0167.54.3.320

Pascarella, E. T., Pierson, C. T., Wolniak, G. C., Terenzini, P. T. (2004). First-generation college students: Additional evidence on college experiences and outcomes. *The Journal of Higher Education, 75*, 249-284. doi: 10.1080/00221546.2004.11772256

Rompf, E. L., & Royse, D. (1994). Choice of social work as a career: Possible influences. *Journal of Social Work Education, 30*(2), 163-171. doi: 10.1080/10437797.1994.10672227

Thomas, D. R. (2006). A general inductive approach for analyzing qualitative evaluation data. *American Journal of Evaluation, 27*(2), 237-246. doi: 10.1177/1098214005283748

Toronto Police Service. (2003). *Policing a world within a city: The race relations initiatives of the Toronto Police Service*. Toronto: Toronto Police Service. Retrieved February 15, 2016 from http://www.torontopolice.on.ca/publications/files/reports/2003.02.13-policingaworldwithinacity.pdf

Seidman, I. E. (1991). *Interviewing as qualitative research: A guide for researchers in education and the social sciences*. New York, NY: Teachers College Press.

Seidman I. E. (2006) *Interviewing as qualitative research: A guide for researchers in education and the social sciences*. New York, NY: Teachers College Press.

Watson, M., & McMahon, M. (2005). Children's career development: A research review from a learning perspective. *Journal of Vocational Behavior, 67*, 119–132. doi: 10.1016/j.jvb.2004.08.011

Whiston, S. C., & Keller, B. K. (2004). The influences of family of origin on career development: A review and analysis. *The Counseling Psychologist, 32*, 493–568. doi:10.1177/0011000004265660

Dos Santos, Luis Miguel is an Assistant Professor at Woosong Language Institute at Woosong University, South Korea. His research interests are adult training and learning, career counselling and development, life-long learning, lived stories, and teachers' professional development. He can be reached at luismigueldossantos@yahoo.com.