

376 Final Paper

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Introduction

Due to its ability to gauge societal and national well-being, life satisfaction research is becoming more and more popular in academic and policy circles. Furthermore, in recent years, there has been a significant integration of life satisfaction and immigration research due to the prominence of international migration (Monteiro & Haan, 2021). As Canada being an internationalized country, people from various countries come to Canada to seek for better opportunities, or life in general. However, merging into a new environment might be difficult for some people due to various reasons. As *Immigrants' Sense of Belonging to the Host Country: The Role of Life Satisfaction, Language Proficiency, and Religious Motives* argued, research has shown that subjective feelings are much more important in the integration of immigrants than the traditional objective parameters of integration (Amit & Bar-Lev, 2014). Furthermore, based on the literature on immigration and subjective well-being, the paper presents a model in which life satisfaction is the main predictor of immigrants' sense of belonging (Amit & Bar-Lev, 2014).

Using the 2018 Canadian Community Health Survey (CCHS) annual component we are able to answer a few questions. Firstly, does the length of immigration time affect an individual's overall life satisfaction. Secondly, does immigrants' sexual orientation affect their life satisfaction. Thirdly, whether immigrants' sense of community belonging affects their life satisfaction. Fourthly, does the total number of hours immigrants work per week affect their life satisfaction. Fifthly, whether immigrants' life satisfaction can be affected by whether or not they seek a regular health care provider. Answering these questions is important for several reasons. First, as immigrants make up a sizable and expanding portion of Canadian society, a more thorough understanding of immigrant life satisfaction is important in order to explore the social environment of living. Second, it's critical to broaden our knowledge of the variables that promote life satisfaction and reduce unhappiness in the current context of anti-Asian sentiment, BlackLivesMatter, and Islamophobia which creates disadvantageous circumstances for immigrants (Monteiro & Haan, 2021). Thus, measuring life satisfaction offers a more profound comprehension of immigrants' self-evaluations of their lives in Canada, which discloses critical details on their capacity to assimilate into and make contributions to Canadian society. As a result of data collection, social support for immigrants would have a more direct and precise structure in order to solve personalized social issues.

I am a Chinese, middle-class, cisgender, heterosexual, able-bodied international student who came to Canada from Beijing, China ten years ago. I came here in grade five, and after attending elementary and secondary school in White Rock, I came to the University of Victoria to pursue a degree in Sociology and Gender Studies. While in China, I lived in a university community, similar to UBC. This is where my grandparents on my father's side worked and raised my father. As a result, in China, where relation is the key solution to all issues, positive relationships between neighbors formed ever since my grandparents' generation. At that time, I lived in an environment where faces were kind and familiar. This gave me a strong sense of belonging to the community caused by extreme satisfaction with life. However, when I came to

Canada, everything changed. Canadians were no longer hospitable and language became the biggest barrier to communication.

Not only did I come across these barriers, my parents' circumstances were the main reason I chose these variables. I, as a student, learned English and was involved in the new community at a reasonable speed level. However, physical rejection and communication barriers to new environments that limit their ability to perceive, and learn due to a fixed cultural mindset prevents my parents from integrating into the new environment. Compared to my mom, my dad was relatively less receptive to new cultures and lifestyles. This is because of his age and inability to immerse himself in new environments as a result of continuing to travel between countries. Although my mom and I could provide companionship, he was always depressed and powerless. His inability to realize his social values in the new environment, his disconnection from society, and his alienation to the society were the reasons for his loss of a sense of belonging. In this situation, his satisfaction with life is directly influenced by his sense of belonging in the local community. However, my mom appeared to be the complete opposite. When she faced the same situation as my dad she had a very different attitude towards her new environment. She took the initiative to improve her English, engage in conversations with her neighbors, and to explore the diversity of her environment. Although the new challenges of life, including language, socialization, financial pressures, and feelings of alienation, made her life very stressful, she quickly found a sense of belonging. She even felt that she was better suited to living in Canada than in China, despite the stress. Her reasoning for this is that a sense of belonging is influenced by environmental magnetism, whereas life stress is brought about by society. As a result, I'm interested in finding the contributors that influence life satisfaction for immigrants on a larger scale of data, and how these contributors impact other immigrants' life satisfaction on average.

Literature Review

This research is novel in that it takes a multifaceted approach to the concept of informal social support, examining its effects in relation to source (family, friends, and neighbors), function (informative, emotional, and instrumental), frequency, and perceived satisfaction for immigrants residing in Italy (Novara et al., 2023). Using the official Italian National Institute of Statistics' definitions of gender and ethnic origin, the sample was initially divided into these categories, in which 726 immigrants, 375 of whom were men and 339 of whom were women, aged 18 to 70, with an average of 7.7 years of residency in Italy, made up the sample (Novara et al., 2023). Ninety percent of Mediterranean migrants arrive in the Sicilian region, where participants were chosen at random for this study, which offers data from an exclusively Italian environment (Novara et al., 2023). The interviews took place in a variety of settings, including social assistance centers, companies, and immigrant associations (Novara et al., 2023). The immigrants signed an informed consent form voluntarily and without obtaining any tangible

benefits. The many functions of social support from each of the sources are found to have moderate and statistically significant connections with one another (Novara et al., 2023). The outcome of the research is that the connections between social support (sources and functions) and resilience, feeling of community, and life happiness are weaker (Novara et al., 2023). In terms of subjective contentment or the frequency of social support, this trend is comparable (Novara et al., 2023). Only a sense of community was adversely correlated with the frequency of emotional assistance from family members. Resilience and a feeling of community are favorably correlated with the availability of informational assistance (Novara et al., 2023). Resilience is correlated with the frequency of emotional support from Italian friends (Novara et al., 2023). In summary, the conversation generated suggests that resilience appears to be enhanced by the interaction of family and new neighbors (Novara et al., 2023). However, friends who are local to the country can help immigrants develop the knowledge and sociocultural skills needed to adjust to their new environment (Novara et al., 2023). In fact, emotional support from friends who are native to Italy has been shown to positively correlate with immigrants' resilience (Novara et al., 2023).

This research aims to investigate the disparities in local community sense of belonging between residents who are immigrants and those who were born in Canada (Kitchen et al., 2015). Research carried out has demonstrated that although there are notable distinctions across regions and within particular ethnic groups, there has been a recent increase in the sense of belonging (Kitchen et al., 2015). Utilizing main data gathered in 1) Charlottetown, Prince Edward Island; 2) Hamilton, Ontario; and 3) Saskatoon, Saskatchewan, in three small-to-medium sized urban locations (Kitchen et al., 2015). 1529 respondents were asked to score their sense of belonging in a household telephone survey (Kitchen et al., 2015). Sociodemographic variables that function as independent variables include self-perceived physical and mental health, income, housing, marital status, education, occupation, living arrangement, age, city of residence, and, for immigrant respondents, years lived in Canada (Kitchen et al., 2015). The study found that all three of the Charlottetown study locations and the overall sample had exceptionally high levels of sense of belonging (Kitchen et al., 2015). However, among immigrants, those who had just lived in Canada for five years or less felt a far smaller sense of belonging (Kitchen et al., 2015). Consistent with the research, positive mental health was shown to be significantly correlated with a positive sense of belonging for both respondents who were born in Canada and those who were immigrants (Kitchen et al., 2015). For immigrants, having a full-time job and owning property are indicators of a positive sense of belonging and these traits are not shared by Canadian-born individuals (Kitchen et al., 2015). In conclusion, the outcome of the research is that it is clear that full-time job and home ownership are prerequisites for being seen to be "fully arrived" in Canadian society from the viewpoint of an immigrant (Kitchen et al., 2015).

In addition to analyzing the students' gender, race/ethnicity, sexual orientation, religious beliefs, political views, citizenship, and academic standing, this study looked into how satisfied

and a part of the college community the students felt (Fan et al., 2020). 2791 undergraduate students from 19 colleges and schools in one PWI in the southeast of the States made up the participants (Fan et al., 2020). There were roughly 16% freshmen, 24% sophomores, 26% juniors, and 34% seniors (Fan et al., 2020) (Fan et al., 2020). Nine variables made up the satisfaction survey subscale (Fan et al., 2020). The elements include chances for student involvement on campus, forums for class discussions, general educational quality, social life on campus, friend-making skills, campus's diversity in terms of race and ethnicity, a sense of community both on and off campus, and the administration's attentiveness to concerns raised by students (Fan et al., 2020). Furthermore, participants were requested to furnish their personal details, encompassing student standing, sex, race and ethnicity, sexual preference, political beliefs, religion, and citizenship (Fan et al., 2020). Compared to students in the majority groups, those in the underrepresented groups—that is, non-White, non-heterosexual, and non-Christian—reported much lower levels of satisfaction and a weaker sense of belonging (Fan et al., 2020). Students who identified as conservatives had much higher levels of satisfaction than those who identified as liberal or moderate (Fan et al., 2020). Additionally, this study demonstrated that students' contentment with their college experience was significantly predicted by their sense of belonging (Fan et al., 2020). To conclude, for college students, the quality of education is crucial since it has been shown that student satisfaction is significantly correlated with the quality of teaching (Fan et al., 2020). Furthermore, while most students expressed happiness with their college experience and a sense of belonging, there was a significant correlation discovered between student contentment and a sense of belonging and factors such as race/ethnicity, sexual orientation, political views, and religious beliefs (Fan et al., 2020).

The goal of the article is to understand the social, cultural, and economic disparities between immigrant communities in Berlin and Amsterdam and to pinpoint the key elements that influence these communities' development of a sense of identity (Cichocka, 2021). Based on sixty semi-structured interviews with Polish migrants living in Berlin and Amsterdam who had at least some work experience while working abroad and had been in their present place of residence for at least two years, the analysis was conducted (Cichocka, 2021). The interviewees' age, gender, educational background, family situation, and length of time spent migrating were all varied (Cichocka, 2021). Regarding social integration, researchers concentrated on the importance and complexity of the various kinds of relationships the immigrants had formed (Cichocka, 2021). The main markers of cultural integration were language proficiency and usage, as well as identification and familiarity with the norms and values of the dominant group (Cichocka, 2021). They tried to take a more comprehensive approach to the economic positions of the migrants in their analysis of economic integration, accounting for things like the respondents' general housing situation in a given area, attitudes toward social institutions, and their incomes (Cichocka, 2021). To conclude, Poles who live in Berlin have a strong emotional connection to the locals. They value the customs and values of the area (Cichocka, 2021). Compared to Poles in Berlin, Amsterdam Poles did not show the same level of loyalty to their

hometown and community (Cichocka, 2021). While most migrants in Berlin are planning to stay in this city for the rest of their lives, Poles in Amsterdam are more likely to think of moving back to Poland or to another nation (Cichocka, 2021). Furthermore, Berlin's geographic proximity to Poland and the potential for quick family reunions or trips back to Poland contributed to the sense of security that Poles felt in Berlin to some extent (Cichocka, 2021).

Current study

The purpose of this research is, whether satisfaction with life in general for immigrants who moved to Canada could be influenced by their total usual hours worked per week, sexuality, sense of belonging in the local community, length of time in Canada, and whether or not they obtain a regular health care provider? By drawing from CCHS 2018 data set, the selected dependent variable is satisfaction with life in general. The independent variables are length of time in Canada since immigration, sex, sense of belonging in the local community, whether or not the respondent has a regular health care provider, and total usual hours worked per week. Furthermore, according to the above information provided, several hypotheses could be conducted. Firstly, an increase in the length of time in Canada since immigration will affect an increase in general life satisfaction resulting in a positive relationship. Secondly, respondents who identify themselves as male will report a higher scale of life satisfaction compared to respondents who identify themselves as female. Thirdly, an increase in the sense of belonging in a local community will affect an increase in general life satisfaction resulting in a positive relationship between the two. In other words, the higher the respondents' sense of belonging in the local community the greater they feel life satisfaction, and those who identify as having a "very strong" sense of belonging will result with the greatest life satisfaction. Fourthly, respondents with a regular health care provider will result in a higher life satisfaction rate compared to respondents without one. Fifthly, the further away the total usual hours worked per week is from the average for both sides will affect a decrease in general life satisfaction resulting in a negative relationship. Thus, respondents who don't work a lot or work extremely high amounts of hours will result in low life satisfaction.

Methods

Data and Sample

The CCHS 2018 survey is a cross sectional survey with the sampling design of stratified, cluster and systematic (Statistics Canada, 2023). The data of the survey were gathered in the health region level of each territory in addition to approximately 100 health regions spread across the ten provinces (Statistics Canada, 2023). Although the reference periods of 2001, 2003, and

2005 involved the interviewing of a sample of over 130,000 respondents, the sample size was reduced to 65,000 respondents annually beginning in 2007 (Statistics Canada, 2023). The samples for the adult population (18 years of age and above) and the youth population (12 to 17 years old) are treated separately (Statistics Canada, 2023). Furthermore, twelve thousand of the thirty thousand respondents were classified as adults and the remaining ten thousand as youth, based on past sample sizes (Statistics Canada, 2023). However, for this research the sample size will be limited to 12897 respondents who meet the requirements. The eleven provinces' 12-year-old and older populations are included as the targeted population in the CCHS and Over the course of two years of gathering, three territories are covered (Statistics Canada, 2023). However, the following groups were not included in the survey's coverage. People living in institutionalized facilities, people living in Nunavik and Terres-Cries-de-la-Baie-James health regions in Quebec, people living on reserves and other Aboriginal settlements in the provinces, and full-time members of the Canadian Forces (Statistics Canada, 2023).

An area frame representing Canadians above the age of 18, as well as a frame containing phone numbers taken from records of Canada Child Benefit for those between the ages of 12 and 17 act as the sampling frame (Statistics Canada, 2023). The adult population is sampled using the area frame utilized by the Canadian Labour Force Survey, an initial sampling step involves selecting a sample of clusters from every stratum (Statistics Canada, 2023). For each cluster that has been chosen, dwelling lists are created in the second stage, and homes are chosen from these lists using a systematic sampling technique (Statistics Canada, 2023). For youth, the Canadian Child Health Service employs a list frame generated from the Canadian Child Benefit data to sample individuals for the juvenile population between the ages of 12 and 17 (Statistics Canada, 2023). A list of every program beneficiary, complete with name, address, and phone number, may be found in the CCB files (Statistics Canada, 2023). The youth who will be immediately selected for phone interviews will be chosen from this list. This then leads to the final sample of approximately 54,100 valid interviews performed using CAI between January and December 2018 (Statistics Canada, 2023). For calculation in general, a total of 94,588 of the units that were chosen for the 2018 CCHS were eligible for the survey; of these, 55,600 respondents provided a response, yielding a 58,8% response rate (Statistics Canada, 2023). Random selection of individual respondents within a household constitutes the unit of analysis. The interviewee selection process is automated during sampling since the youth population sample is chosen from a list mentioned above. The selection technique used for adults took into consideration the needs of the user, cost, design efficiency, response burden, and operational constraints. A single individual is chosen for each family included in the 18+ sample based on a range of probabilities that consider the individual's age and the makeup of the household.

Data is gathered by the CCHS using two distinct CAI applications: one for telephone interviews (CATI) and another for in-person interviews (CAPI) (Statistics Canada, 2023). An entry component, a health content component, and an exit component made up each application. Of these completed cases, about 25% were handled in person with CAPI, and the remaining 75% were handled over the phone with CATI (Statistics Canada, 2023). Regarding the province, the

provinces are separated into physical areas called clusters, which typically consist of between 100 and 600 homes (Statistics Canada, 2023). Clusters are categorized into homogenous, mutually exclusive geographic or socioeconomic groupings after being assigned to one of the six LFS rotation groups. On the other hand, the bigger communities in each territory have its own stratum, while the smaller communities are divided into groups according to a range of factors such as population, geographic data, percentage of Inuit and/or Aboriginal people, and median household income (Statistics Canada, 2023). In the Yukon, ten in the Northwest Territories, and ten in Nunavut, the LFS established six design strata (Statistics Canada, 2023). The initial step of selection for strata made up of several communities was to choose one community at random from each design stratum, with a probability based on population size. The second step then involved choosing households within the chosen community by applying the previously mentioned sampling approach.

Measures

Dependent Variable

The dependent variable for the research assignment is satisfaction with life in general, defined by a scale of 0 to 10, where 0 means "very dissatisfied" and 10 means "very satisfied". Immigrants have historically been viewed as a population at risk for emotional hardships, feelings of alienation and loneliness, depressed moods, or pain (Russo-Netzer et al., 2019). Furthermore, previous assimilation paradigm presumptions said that non-dominant groups would eventually become homogenized and lose their unique behavioral traits (Russo-Netzer et al., 2019). Similarly in a study by Russo-Netzer (2019), life satisfaction was measured using the satisfied with life scale, which is one of the most popular measures of subjective well-being, which the reliability and validity of the scale has been demonstrated in several studies. Ordinal variables, satisfaction with life in general, is coded using a scale of 0 to 10, and the question is framed as how do you feel about your life as a whole right now? Respondent choices were then coded (00 - 10) very dissatisfied to very satisfied, (97) don't know, (98) refusal, (99) not stated.

Independent Variable

Length of time in Canada since immigration, categorized with for 0 to 9 years, and for 10 to 121 years. Despite recent improvements, racism and xenophobia remain substantial issues within Canadian society. Experiences of discrimination/intolerance, as well as the loss of relationships during immigration, undermine feelings of belonging, although life satisfaction tends to increase with length of residency in Canada (Kitchen et al., 2015). The importance of separating the length of time in Canada into various categories may have a significant impact on research results. The study that Kitchen (2015) has done through similar methods by categorizing years into groups finds that satisfaction improves among immigrants who have lived in Canada for longer periods of time. Immigrants residing in Canada for five years or less had

significantly lower levels of SoCB compared to those who have lived in the country for 6 years or more. This is coded by two ordinal categories of (1) length of time in Canada since immigration for 0 to 9 years, and (2) length of time in Canada since immigration for 10 to 121 years, together with (6) valid skip, and (9) not stated.

Sex, is the third independent variable. Similar to Fan's study (2020), they coded male and female for gender, but also included non-minority gender groups. Even though there are many other factors influencing the dependent variable, separating gender may result in different answers. For example, their result identifies male students reported the most satisfaction, followed by female students, and the students who selected a gender identity other than male or female reported the least satisfaction (Fan et al., 2020). Sex is defined by two nominal variables. The question is framed as is [respondent name] male or female? The categories were then coded as (1) male, (2) female.

Sense of belonging in the local community, defined by a reverse coded scale of 1 to 4, where after recording, 1 means "very weak" and 4 means "very strong". It is acknowledged that a person's sense of belonging has a significant role in both their psychological and physical health (Kitchen et al., 2015). The scale of measurement is similar to the study done by Kitchen (2015), where the focus group information was analyzed using thematic coding to identify factors that enhance and detract from sense of belonging. When asked, 'how would you describe your sense of belonging to your local community?', the result in their study is that 7 % of respondents indicated that it is 'very weak', while 56 % replied that it is 'somewhat strong' and a further 16 % said that their sense of belonging is 'very strong' (Kitchen et al., 2015). This is an ordinal scale while the question is framed as how would you describe your sense of belonging to your local community? Would you say it is...? The reversed coding being used are (1) very weak, (2) somewhat weak, (3) somewhat strong, (4) very strong, (7) don't know, (8) refusal, and (9) not stated.

Whether or not the respondent has a regular health care provider is the fourth independent variable. According to Kitchen et al. (2015), mental health is influenced by a person's satisfaction with life, and depression rates have been linked to low levels of life satisfaction. Perceptions of one's bodily and mental well-being were found to be closely correlated with a sense of community belonging in every cycle of the CCHS survey (Kitchen et al., 2015). Consequently, considering its connection to both physical and psychological well-being, creating a sense of belonging is unquestionably a public health concern. In specific for the measurement of this variable, nominal yes or no provide the clearest answers. For example, similar methods for determining whether or not the respondent has sought for a health care provider has been done by Hughey et al (2017). where 27% said they had not seen a health care provider in the past five years. The question is framed as do you have a regular health care provider? By this, we mean one health professional that you regularly see or talk to when you need care or advice for

your health. Categories were coded as (1) yes, (2) no, (7) don't know, (8) refusal, and (9) not stated.

Total usual hours worked per week, defined by a scale of 0 to 99 hours. The impact of working time on overall life satisfaction has been more extensively studied in the related literature (Shao, 2022). In previous studies done by other researchers, the weekly working time is negatively and significantly correlated with life satisfaction, thus implying that fewer working hours can raise life satisfaction (Shao, 2022). By using interval measurement, the relationship between usual hours worked and life satisfaction could be calculated with decimals. For example in Shao's study (2022), the work time–satisfaction nexus is significant at the 1% level in the mid-income group and at the 10% level in the high-income group, which implies that mid and high earners tend to work less to achieve life satisfaction. This is defined by an interval scale of 0 to 99 hours, and the categories were coded as (000 - 099) numbers of hours, (996) valid skip, and (999) not stated.

Plan of analysis

For the dependent variable, satisfaction with life in general, the level of measurement will be continuous, ordinal but treated as continuous, using mean (T. Humphrey, intro to quantitative data analysis, February, 2024). The level of measurement for the length of time in Canada since immigration is going to be categorical ordinal, using mode (T. Humphrey, intro to quantitative data analysis, February, 2024). The level of measurement for sex will be categorical, nominal, using mode (T. Humphrey, intro to quantitative data analysis, February, 2024). The level of measurement for sense of belonging in the local community will be continuous, ordinal but treated as continuous, using mode (T. Humphrey, intro to quantitative data analysis, February, 2024). The level of measurement for whether they have a regular health care provider or not will be categorical, nominal, using mode (T. Humphrey, intro to quantitative data analysis, February, 2024). The level of measurement for total usual hours worked per week will be continuous, in specific interval/ratio. So, will be treated using mean (T. Humphrey, intro to quantitative data analysis, February, 2024).

I will use the T test to examine how satisfaction with life in general (DV) changes with the length of time in Canada since immigration (IV) (T. Humphrey, Bivariate data analysis, March, 2024). Satisfaction with life is an ordinal level variable but treated as a continuous level variable, and the length of time is an ordinal level variable with 2 categories. I will use the T test to examine how satisfaction with life in general (DV) changes with sex (IV) (T. Humphrey, Bivariate data analysis, March, 2024). Satisfaction with life is an ordinal level variable but treated as a continuous level variable and sex is a nominal level variable. I will use ANOVA to examine how satisfaction with life in general (DV) changes with the sense of belonging in the

local community (IV) (T. Humphrey, Bivariate data analysis, March, 2024). Sense of belonging will be treated as ordinal level variables but treated as continuous level variables, and life satisfaction will be treated as categorical. I will use the T test to examine how satisfaction with life in general (DV) changes with whether they have a regular health care provider or not (IV) (T. Humphrey, Bivariate data analysis, March, 2024). Satisfaction with life is an ordinal level variable but treated as a continuous level variable and health care provider is a nominal level variable. I will use Pearson's r to examine how satisfaction with life in general (DV) changes with the total usual hours worked per week (IV) (T. Humphrey, Bivariate data analysis, March, 2024). Satisfaction with life is an ordinal level variable but treated as a continuous level variable and total hours worked is an continuous level variable.

Results

Descriptive and bivariate results

Table 1: Descriptive Statistics for study Variables

Variable	Mean / %	Std. Dev	Min	Max
Length of time in Canada				
0-9 years	26.4			
10-121 years	73.6			
Sex				
Male	49.6			
Female	50.4			
Sense of belonging				
Very weak	7.4			
Somewhat weak	24.8			
Somewhat strong	50.9			
Very strong	16.9			
Health care provider				
Yes	85.0			
No	15.0			
Hours worked per week	40.01	13.244	0	99

Satisfaction with life	8.11	1.558	0	10
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Approximately 26.4% of immigrants indicate they have immigrated to Canada for 0 to 9 years, and 73.6% of immigrants indicate they have immigrated to Canada for 10 to 121 years. 49.6% of the sample identify themselves as male, and 50.4% of the sample identify themselves as female. 7.4% of the sample indicate they feel a very weak sense of belonging, and 24.8% indicate they feel a somewhat strong sense of belonging. At the same time, 50.9% indicate they feel a somewhat strong sense of belonging, and 16.9% indicate they feel a strong sense of belonging. 85.0% of the sample indicate that they have a regular health care provider, and 15.0% indicate they do not have a regular health care provider. Respondents worked on average 40.01 hours per week. Respondents were, on average, has a length of time in Canada since immigration for 10 - 121 years (SD=1.621) and self identify as female (SD=1.590) who has a regular health care provider (SD=1.565). On average, the sample work 40.01 hours (SD=13.244), and have on average 8.11 out of 10 satisfaction with life in general (SD=1.558).

Table 2: Bivariate Relationships between each independent variable and my dependent variable: Life Satisfaction

Variable	mean/Pearson's R	Std. Dev	Test	Value	Significance
Length of time in Canada					
0-9	8.18	1.498	T test	3.392	p = 0.066
10-121	7.98	1.621			
Sex					
Male	8.10	1.526	T test	61.177	***p<.001
Female	8.11	1.590			
Sense of belonging					
Very weak	7.29	2.138	F test	1408.292	0.000
Somewhat weak	7.78	1.548			
Somewhat strong	8.22	1.405			
Very strong	8.60	1.478			

Health care provider					
Yes	8.12	1.565	T test	39.222	***p<.001
No	8.01	1.520			
Hours worked	0.014**		Pearson's r		***p<.001

* p<.05 ** p<.01 *** p<.001

There is no difference in life satisfaction across length of time in Canada as $p = 0.066$ which is greater than 0.05. This allows us to accept the null hypothesis and conclude that there might not be a relationship between the two variables. The probability of finding an empirical T value of 61.177 for sex and satisfaction with life in general is $***p < .001$. This allows us to conclude that satisfaction with life in general is impacted by sex and reject the null hypothesis. Furthermore, females experience higher life satisfaction compared to men by 0.01. Sense of belonging tells us that not all means are equal because the F-value is significant as $p = .000$ which is less than .001, so we reject the null hypothesis here. Results show that those who have a very strong sense of belonging experience higher satisfaction with life in general at $***p < .001$ compared to the other three. In particular, those who identify with a somewhat strong sense of belonging are second high in life satisfaction. Respondents who identify with a somewhat weak sense of belonging are the third highest in life satisfaction, while those who identify with a very weak sense of belonging have the lowest life satisfaction. The probability of finding an empirical T value of 39.222 for regular health care providers and satisfaction with life in general is $***p < .001$. This allows us to conclude that satisfaction with life in general is impacted by whether our sample has a regular health care provider and we reject the null hypothesis. In specific, people with health care providers experience higher life satisfaction compared to those who don't by 0.11. The relationship between total hours worked per week and satisfaction with life in general consumption is weak, positive and significant at $***p < .001$. As hours worked per week increases so too does life satisfaction in general.

Multivariate results

Table 3: Regression Summary of all independent variables regressed on perceived mental health (N=12897)

Model	b	Se (Std. Error)	t
Length of time in Canada since immigration 0 - 9 years	.159***	.028	5.685

Sex = male	.082**	.026	3.131
Sense of belonging to local community	.425***	.016	27.149
Health care provider = yes	-.069*	.034	-2.042
Total usual hours worked per week - (D)	-.001	.001	-.966
(constant)	6.933		
R2	.058		

* p<.05 ** p<.01 *** p<.001

$$Y_{\text{lifesatisf}} = 6.933 + .0425X_{\text{belonging}} + 0X_{\text{hoursworked}} + .159X_{\text{immigration0-9}} - 0.069X_{\text{yeshealthcare}} + .082X_{\text{male}}$$

For someone who is Canadian while doesn't identify their gender, has zero sense of belonging, does zero work per week, and doesn't have a regular health care provider, they will have a life satisfaction of 6.933.

Length of time in Canada since immigration (0 - 9 years) (b = .159, t = 5.685)

Those who have a length of time in Canada since immigration for 0 - 9 years have a .159 higher mean score on well-being compared to people who have a length of time in Canada since immigration for 10 - 121 years, when holding the other variables in the model constant. This difference is statistically significant at ***p < .001.

Gender (male) (b = .082, t = 3.131)

The coefficient of .082 suggests that males have an average life satisfaction score that is .082 points higher than females, holding the other variables constant. This sex difference is significant at ** p<.01.

Sense of Belonging (b = .425, t = 27.149)

A one unit increase in sense of belonging is associated with a .0425 unit increase in life satisfaction, controlling for the other variables in the model. This positive relationship is significant at ***p < .001.

Total usual hours worked per week (b = -.001, t = -.966)

For every one unit increase in total usual hours worked per week, life satisfaction decreases by

.001 units, controlling for the other variables in the model. This negative relationship is not statistically significant if we use the strict cut-off of 0.05 as $p = .334$. However, total usual hours worked per week has a slope of zero because it is not significant as $p = .334$, which is $>$ than .05. Thus, we don't interpret direction or relationship here because there isn't enough evidence to support one.

Health care provider (yes) ($b = -.069$, $t = -2.042$)

The coefficient of $-.069$ suggests that those respondents who have a health care provider have an average life satisfaction score that is 0.069 points lower than those who don't have a health care provider, holding the other variable constant. This health care provider difference is significant at $* p < .05$.

Our R-square is .058. This means we accounted for 5.8% of the variation in Y with sense of belonging, gender, health care provider and length of time in Canada since immigration, and total usual hours worked per week. Our result does pretty well in explaining the relationship between life satisfaction with all the dependent variables.

Conclusions and Limitations

Conclusion:

The aim of this study is to determine whether the total number of hours that immigrants work per week, their sexual orientation, their sense of community belonging, how long they have lived in Canada since immigration, and whether or not they see a regular health care provider all have an impact on their overall life satisfaction.

Additionally, based on the facts given, a number of bivariate hypotheses could be made. Firstly, a longer time spent in Canada following immigration will correlate with higher levels of overall life satisfaction, which will foster favorable relationships. However, results show respondents who lived in Canada since immigration for 0-9 years have a higher life satisfaction than those who immigrated for 10-121 years by a mean of 0.2. But, the significance level is $>$ than .05. Thus, we don't interpret direction or relationship here because there isn't enough evidence to support one. Second, compared to respondents who identify as female, respondents who identify as male will report a greater scale of life satisfaction. However, the results show that females experience a higher life satisfaction compared to men by a mean of 0.01. Thirdly, there is a positive correlation between an increase in overall life satisfaction and a greater sense of belonging in the local community. Put another way, respondents' life satisfaction increases with their sense of belonging to the local community; hence, individuals who report feeling most "very strong" about their sense of belonging will also report the highest levels of life pleasure. This hypothesis has been proven as correct. The greater the sense of belonging respondents feel will result in a greater life satisfaction level. Fourth, compared to those without a regular health

care provider, those who have one will have a better life satisfaction percentage. This hypothesis has been proven correct, in which respondents who have a regular health care provider result in a mean of 0.11 higher life satisfaction compared to those who don't have a regular health care provider. Fifth, a drop in overall life satisfaction will result in a negative relationship if the total customary hours worked each week deviates from the average for both sides. Therefore, people with low life satisfaction are those who either don't work very much or work very high hours. However, results show that the hours worked per week result in a positive relationship, meaning the higher the respondents work, the greater the life satisfaction they feel.

Sense of belonging in the local community does impact life satisfaction. More specifically, sense of belonging has a positive impact on life satisfaction such that sense of belonging increases, life satisfaction increases. This is independent of length of time since immigration, gender, health care provider, and total hours worked. In other words, a sense of belonging has an impact over and above the length of time since immigration, gender, health care provider, and total hours worked. We also see that those who immigrated for less or equal to 9 years have a higher level of life satisfaction than those who immigrated for longer than 9 years, and males identify with higher life satisfaction compared to females. This relationship between gender and life satisfaction changed after being included in the multiple regression. Furthermore, sense of belonging has a positive relationship with life satisfaction. Thus an increase in sense of belonging will cause an increase in life satisfaction. Also, respondents who have a health care provider have a lower life satisfaction compared to those who don't, which relationship between care provider and life satisfaction changed after being included in the multiple regression. The total hours worked per week has a negative relationship with life satisfaction, however, we don't interpret direction or relationship here because there isn't enough evidence to support one. Our model accounts for 5.8% of the variation in life satisfaction which suggests there are a number of other factors that impact life satisfaction that we haven't considered here.

Limitation:

The limitation of this research firstly goes under the conditions of causality. Based on correlation, we cannot predict a change in the independent variables will be the direct influence in the change in the dependent variable. We cannot say that correlation in relationships is equal to causation. In addition, we cannot say the influence in the change of variables is a one way influence considering temporal ordering. For example, we don't have the proof of saying by having a higher sense of belonging life satisfaction increased as a result or whether life satisfaction first influenced the sense of belonging by being the independent variable. Thirdly, non spuriousness tells us that there are many hidden considerations that we haven't included, supported by our 5.8% of the variation in life satisfaction. We might be ignoring other important independent variables causing this result. In addition, the representativeness is limited to a two-year period due to sample size and territory distribution. Furthermore, the generalization of the survey has been maximized. Interviewers were advised to try their hardest to secure

interviewees. Interviewers were told to follow up with a human visit if their telephone requests for appointments were not fulfilled. A pamphlet regarding the survey and the desire to get in touch was placed at the door if no one was home when the person arrived. Many follow-up calls were placed on various days and at various hours. Furthermore, as we excluded certain respondents not matching our requirements, this research is only generalizable to male immigrants under 9 years of arrival who have a regular health care provider. As a result, our total respondents ended up to be 12897, which could be a limitation of this research.

OUTPUTS:

GEN_030 into RECODE_senseofbelonging (Sense of belonging to local community)
 Old Value New Value Value Label

4	1	Very weak
3	2	Somewhat weak
2	3	Somewhat strong
1	4	Very strong

Length of time in Canada since immigration - (D)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Length of time in Canada since immigration 0 - 9 years	5106	6.5	26.4	26.4
	Length of time in Canada since immigration 10 - 121 years	14251	18.0	73.6	100.0
	Total	19357	24.5	100.0	
Missing	Canadian-born	59626	75.5		
Total		78983	100.0		

Has a regular health care provider

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	67109	85.0	85.0	85.0
	No	11874	15.0	15.0	100.0
	Total	78983	100.0	100.0	

Descriptives

Satisfaction with life in general

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
Very weak	5834	7.29	2.138	.028	7.24	7.35
Somewhat weak	19552	7.78	1.548	.011	7.76	7.80
Somewhat strong	40230	8.22	1.405	.007	8.21	8.24
Very strong	13367	8.60	1.478	.013	8.57	8.62
Total	78983	8.11	1.558	.006	8.10	8.12

Descriptives

Satisfaction with life in general

	Minimum	Maximum
Very weak	0	10
Somewhat weak	0	10
Somewhat strong	0	10
Very strong	0	10
Total	0	10

ANOVA

Satisfaction with life in general

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	9740.221	3	3246.740	1408.292	.000
Within Groups	182079.513	78978	2.305		
Total	191819.734	78981			

Descriptives

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Satisfaction with life in general	78983	0	10	8.11	1.558
Total usual hours worked per week - (D)	52572	0	99	40.01	13.244
Valid N (listwise)	52572				

Frequency Table

Sex

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	39214	49.6	49.6	49.6
	Female	39769	50.4	50.4	100.0
	Total	78983	100.0	100.0	

Sense of belonging to local community

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very strong	13367	16.9	16.9	16.9
	Somewhat strong	40230	50.9	50.9	67.9
	Somewhat weak	19552	24.8	24.8	92.6
	Very weak	5834	7.4	7.4	100.0
	Total	78983	100.0	100.0	

Sense of belonging to local community

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very weak	5834	7.4	7.4	7.4
	Somewhat weak	19552	24.8	24.8	32.1
	Somewhat strong	40230	50.9	50.9	83.1
	Very strong	13367	16.9	16.9	100.0
	Total	78983	100.0	100.0	

Post Hoc Tests

Multiple Comparisons

Dependent Variable: Satisfaction with life in general

Tukey HSD

(I) Sense of belonging to local community	(J) Sense of belonging to local community	Mean Difference (I-J)	Std. Error	Sig.
Very strong	Somewhat strong	.371*	.015	.000
	Somewhat weak	.817*	.017	.000
	Very weak	1.305*	.024	.000
Somewhat strong	Very strong	-.371*	.015	.000
	Somewhat weak	.446*	.013	.000
	Very weak	.933*	.021	.000
Somewhat weak	Very strong	-.817*	.017	.000
	Somewhat strong	-.446*	.013	.000
	Very weak	.487*	.023	.000
Very weak	Very strong	-1.305*	.024	.000
	Somewhat strong	-.933*	.021	.000
	Somewhat weak	-.487*	.023	.000

Oneway

Descriptives

Satisfaction with life in general

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
Very strong	13367	8.60	1.478	.013	8.57	8.62
Somewhat strong	40230	8.22	1.405	.007	8.21	8.24
Somewhat weak	19552	7.78	1.548	.011	7.76	7.80
Very weak	5834	7.29	2.138	.028	7.24	7.35
Total	78983	8.11	1.558	.006	8.10	8.12

Descriptives

Satisfaction with life in general

	Minimum	Maximum
Very strong	0	10
Somewhat strong	0	10
Somewhat weak	0	10
Very weak	0	10
Total	0	10

ANOVA

Satisfaction with life in general

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	9740.221	3	3246.740	1408.292	.000
Within Groups	182079.513	78978	2.305		
Total	191819.734	78981			

T-Test

Group Statistics

		Has a regular health care provider	N	Mean	Std. Deviation
Satisfaction with life in general	Yes		67109	8.12	1.565
	No		11874	8.01	1.520

Group Statistics

		Has a regular health care provider	Std. Error Mean
Satisfaction with life in general	Yes		.006
	No		.014

Group Statistics

		Sex	N	Mean	Std. Deviation	Std. Error Mean
Satisfaction with life in general	Male		39214	8.10	1.526	.008
	Female		39769	8.11	1.590	.008

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of .
		F	Sig.	t
Satisfaction with life in general	Equal variances assumed	61.177	<.001	-1.249
	Equal variances not assumed			-1.249

Group Statistics

		Length of time in Canada since immigration - (D)	N	Mean	Std. Deviation
Satisfaction with life in general	Length of time in Canada since immigration 0 - 9 years		5106	8.18	1.498
	Length of time in Canada since immigration 10 - 121 years		14251	7.98	1.621

Descriptive Statistics

	Mean	Std. Deviation	N
Satisfaction with life in general	8.13	1.469	12897
Sex	1.46	.499	12897
Total usual hours worked per week - (D)	39.52	12.779	12897
Sense of belonging to local community	2.18	.807	12897
DHH_SEX=Male	.5377	.49859	12897
SDCDGRES=Length of time in Canada since immigration 0 - 9 years	.2916	.45451	12897
PHC_020=Yes	.8268	.37848	12897

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.241 ^a	.058	.058	1.426

a. Predictors: (Constant), DHH_SEX=Male, SDCDGRES=Length of time in Canada since immigration 0 - 9 years, Sense of belonging to local community, PHC_020=Yes, Total usual hours worked per week - (D)

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	6.933	.068		102.327	.000
	Sense of belonging to local community	.425	.016	.234	27.149	<.001
	Total usual hours worked per week - (D)	-.001	.001	-.009	-.966	.334
	SDCDGRES=Length of time in Canada since immigration 0 - 9 years	.159	.028	.049	5.685	<.001
	PHC_020=Yes	-.069	.034	-.018	-2.042	.041
	DHH_SEX=Male	.082	.026	.028	3.131	.002

a. Dependent Variable: Satisfaction with life in general

Variable Creation

	Label
SINCEIMMIGRATION_1	SDCDGRES=L length of time in Canada since immigration 0 - 9 years
SINCEIMMIGRATION_2	SDCDGRES=L length of time in Canada since immigration 10 - 121 years
SINCEIMMIGRATION_3	SDCDGRES=C anadian-born

Create dummy variables

Variable Creation

	Label
SEX_1	DHH_SEX=Male
SEX_2	DHH_SEX=Female

Create dummy variables

Variable Creation

	Label
HEALTHPROVIDER_1	PHC_020=Yes
HEALTHPROVIDER_2	PHC_020=No

Correlations

		Satisfaction with life in general	Total usual hours worked per week - (D)
Satisfaction with life in general	Pearson Correlation	1	.014**
	Sig. (2-tailed)		<.001
	N	78983	52572
Total usual hours worked per week - (D)	Pearson Correlation	.014**	1
	Sig. (2-tailed)	<.001	
	N	52572	52572

** . Correlation is significant at the 0.01 level (2-tailed).

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