Exploration of the Relationship between Social Support and Healthcare Utilization Among Adult Immigrants to Canada

By

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ABSTRACT

Healthcare is only a protective factor regarding health outcomes if it is used. While differences exist across various populations regarding healthcare utilization, this study focuses on people born outside of Canada, specifically landed immigrants (permanent residents), using the Canadian Community Health Survey 2017/2018 (CCHS). Those born outside of Canada are an increasingly large segment of the Canadian population. Therefore, their healthcare use represents an increasing portion of healthcare utilization. For a variety of sociodemographic and systemic reasons, utilization rates for this population are likely to vary. This study explores two potentially protective factors and their interaction in predicting healthcare access, and ultimately utilization: social support and length of time in country. An exploration of the predictive power of social support was undertaken the lenses of social cognitive and social capital theories. These theories come together to help understand motivations for and supports of healthcare utilization.

The three hypotheses in this study were: social support and the length of time in country both protectively predict health care utilization (i.e., new(er) comers were at relative risk of low healthcare utilization), and social support and time in country interact such that the protective effect of social support is larger among more potentially vulnerable or at-risk people who landed more recently (i.e., new(er)comers). Each hypothesis was systematically tested across three outcome indicators of healthcare utilization: has a regular healthcare provider, has a place to go for a minor health problem, has an unmet healthcare need. Outcome descriptions suggested that 10% to 20% of landed immigrants (permanent residents) may not be utilizing healthcare as per the variables chosen in this study.

The unique, diverse and potentially underserviced (but with noted strengths and resiliencies), study sample of 3,977 adult landed Canadian immigrants was observed to be demographically vulnerable (prevalent racialized people and those speaking other than an official language), yet relatively well educated and healthy with relatively strong social supports compared with other Canadian residents. Furthermore, within this unique and diverse sample, more recent immigrants (landed less than 10 years ago) were even more demographically vulnerable, and additionally socioeconomically vulnerable, yet still relatively healthy and reporting high levels of social supports. Among relative newcomers, those with strong social supports were 56% more likely than those less well supported to have ready healthcare access. However, this protective association was not observed among those who landed more than 10 years ago.

Findings suggest that social support has implications for healthcare utilization, and even more implications for the most vulnerable, more recently arrived immigrants to Canada. Subsequently, harnessing social support for increased healthcare utilization can be a powerful in the support of healthy communities. This study culminates in recommendations for social work research, practice, and education, allowing for current and future social workers and educators to best understand how to connect to clients at the intersections of these critical issues. In finding creative solutions, like increased social support, to better access and utilize healthcare, social workers can approach clients from strength based, anti-oppressive approaches that are at the core of our profession.
Keywords: *healthcare, social support, immigration, settlement*

DEDICATION

For the Gluzman, Levitz and Shobola Families, of which I am apart, and especially my parents Ingrid and Gerry Levitz. Thank you for always encouraging me to 'keep moving forward, kiddo'.

As the grandchild, wife, and stepmother of those who have come from away, I hope that I have been able to provide a fraction of the love and support you have provided me.

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There's a poster on Dr Robin Wrights wall at the school of social work that reads 'The Incredible Journeys', though it took some time to realize how true those words would prove to be. A lot of life has happened during my time in this program, loved ones have left and others have come, each impacting this process in innumerable ways.

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POSITIONALITY

This dissertation has been written from the perspective of a Jewish, settler woman, who is married to a (now citizen) immigrant. As a social worker, I have worked within, across, and for diverse communities for decades, most recently spearheading a newcomer mental wellness initiative for immigrants, refugees, and migrant farmworkers in Southwestern Ontario. At the time, the larger social service community could access health care and settlement programming but not much that linked the two at the individual level and it became quickly evident that significant potential was lost due to this gap. After hearing about the importance of social support and the deep ramifications of its lack from my family of origin and larger community (both in present and past contexts) social support has been at the core of my understanding of the world for most of my life. The combination of these two experiences has culminated in this dissertation. While I, myself, am not a newcomer, my family history as a Jew is deeply informed by the power of community and the necessity of social support. As part of a blended family, I have seen firsthand that navigating complex, unfamiliar systems requires more than just intelligence and exposure, but, in fact, social support. Through an exploration of the role of this central variable in decision making, I hope to have highlighted, that valuable resources and opportunities are not missed due to a lack of education, understanding or some other perceived failure, but rather exposure and the need for support along the way.

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LIST OF ABBREVIATIONS

Abbreviation	Full Text
AOP	Anti-Oppressive Practice
CCHS	Canadian Community Health Survey
CI	Confidence Interval
EE	Express Entry
HCU	Healthcare Utilization
IRCC	Immigration, Refugee Citizenship, Canada
GAR	Government Assisted Refugee
LIP	Local Immigration Partnership
OHIP	Ontario Health Insurance Plan
OR	Odds Ratio
OHT	Ontario Health Team
PR	Permanent Resident
SPS	Social Provisions Scale
SWAG	Social Work and Gerontology
SWIS	Social Work in Settlement

CHAPTER 1: INTRODUCTION AND RATIONALE

The following dissertation explores the potentially protective relationships between social support and healthcare utilization with a focus on time in country for immigrants to Canada through the use of the Canadian Community Health Survey (CCHS) 2017/2018. In order to place this study in the context of the current socio-political climate, a background and rationale will first be presented. This is intended to highlight the importance of ensuring the health of immigrants. This is done through a review prevalence of immigrants in Canada, and therefore the costs of their care, including information about healthcare utilization and central research questions to ground and focus this dissertation.

Background

The research questions that underpin this dissertation explore the potentially protective nature of social support in regard to healthcare utilization for immigrants to Canada, with an added focus on length of time in country. Globalization and international conflict continue to fuel migration across the globe. The social, political, and economic reasons for migration are as diverse as immigrants themselves, and Canada herself receives increasing numbers of migrants annually. In 2018, the number of permanent residents alone was approximately 300,000 (Government of Canada, 2018a; Government of Canada, 2018b), and these numbers are expected to rise significantly (Turin et al, 2021). To this end, understanding the history of Canada's relationship with immigrants and immigration is central. Often, people choose to migrate because of global inequities, and the perception of a 'better life' in Canada. These inequities can affect health on every level. The process of migration and settlement itself can also be complex, daunting, and challenging to new migrants' health in a variety of ways (Government of Canada, 2009; 2014a; Vineberg,2015. Good health is essential for tackling the

demands of integration. Rather, health is a complex process that exists at the intersections of many facets of life. The Canadian Community Health Survey (CCHS) defines health as more than just the absence of illness or disease, with sociological, emotional, and physical dimensions (Beland, 2002). In addition to the hurdles of navigating a new country's norms and systems, many leave loved ones and familiarity behind, (Balneaves, et al, 2007; Yan & Anucha, 2017) which leaves immigrants vulnerable while facing the settlement process, and subsequent integration/acculturation with lessened social support. It can take a long time to build or rebuild these systems of social support.

While the Canadian government does offer some programming and support to new Canadians, these programs are publicly funded, largely focused on newer arrivals, and expensive for the taxpayer (Government of Canada, 2019). These Federally run programs operate in complex economic contexts, including inflation and an increased demand to do more with less. Within this institutionally cash strapped environment, it is essential to understand how other, informal and/or non-government funded systems and approaches can help augment depleted programming to facilitate a healthier settlement process. As navigators and guides across different social challenges, social workers are well poised to support here. To this end, understanding the potentially protective relationship between social support and healthcare utilization among immigrants (especially for the most vulnerable) to Canada may help to facilitate greater access to the health care system and therefore utilization This utilization may in turn result in improved health outcomes for new Canadians.

Both main foci of this dissertation, healthcare utilization and social support, with a focus on time in country, may affect healthcare outcomes,. Primary health care has been shown to be a protective factor in contributing positively to both individual and community health status by

several researchers (Hutchison, 2013; Starfield, 2008; Starfield, Shi & Macinko, 2005; Valentin et al, 2013). All of this contributes to the assertion in the Canada Health Act that utilization of health care will contribute to strong, positive health outcomes individually and collectively for residents of Canada (Canada Health Act, 1985).Similar to healthcare utilization, the Public Health Agency of Canada recognizes social support as a protective factor in individual and community health and wellbeing (Orpana, Lang & Yurkoski, 2019). Further, many researchers point to a negative relationship between social support and the development of symptoms of illness. Specifically, a lack of social support has been connected to poor health outcomes. (Caron 2012; Caron, 2013; Uchino, 2009).

Health coverage in Canada is under provincial jurisdiction and coverage varies across the country. Each province is guided by the Canada Health Act. This Act ensures that criteria are in place to allow healthcare to be insured by provincial governments and was adopted in 1984 (Canada Health Act, 1985;Government of Canada, 2020). Prior to this, the Constitution Act of 1867 tasked the federal government with the oversight of hospitals, as well as charities and asylums (Government of Canada, 2019). Each province is responsible for managing health care spending with money from both the federal and provincial budgets. Coverage is similar across provinces, especially as it relates to primary care coverage. This includes visits to doctor's office and many basic medical tests. Coverage is available typically after a brief period of residence, in many cases three months (Alberta Health Services, 2022; British Columbia Government 2022; Newfoundland and Labrador Government, 2022; Prince Edward Island Government, 2022).

Contextualizing Canadian Immigration Policy

While the White Paper of 1967 expanded Canada's immigration policies, before that time, Canada had a history of exclusion based on race, some examples of which are highlighted here. The Chinese Immigration act of 1885 placed an (often prohibited) tax on each Chinese person who was able to arrive in Canada, and a revision in 1923 made these arrivals even more difficult (Taylor, 1991). There was some reprieve allowing Chinese residents of Canada to sponsor family members, but also laws prohibiting Chinese people to immigrate here without a family tie, which remained in place until 1932. Japanese Canadian residents also faced racism in the form of forced displacement and internment in British Columbia due to the War Measures Act of 1942. The alternative to internment was repatriation to Japan (McRae,2017; National War Museum, 2023). One famous example of the harms of Canadian immigration policy can be seen in the instance of Komagata Maru, where Canada refused the entry of a ship with South Asian Sikh, Hindu and Muslim passengers, though India was already part of the commonwealth, citing the 'single continuous journey act' of 1910 (Roy & Sahoo, 2016) .Quotas of immigrants from South Asia were very strict and not lifted until 1962 (Matas, 1985) and the 1800s, voluntary Black migration was not allowed by Canadian law, and Canada also allowed for the enslavement of Black Canadians (Bashi,2004).

Further, in 1910(and largely intact until 1978), Canadian Immigration law allowed lawmakers to reject immigrants ""owing to their peculiar customs, habits, modes of life and methods of holding property and because of their probable inability to become readily assimilated" (Matas,1985,p.8). Rather, White immigrants, primarily from Britain and other commonwealth countries were to be prioritized as well as US citizens. These modifications were only significantly changed in the 1950s (Taylor, 1991). However, around this time, Prime Minister Mackenzie King shared that the 'intent of the government to change the social composition of the country' (Topper, 1993,p. 256). In this spirit, displaced persons, including Jews after the holocaust,

could not easily enter Canada. "Just over a year after the guns fell quiet in Europe, an opinion poll found that Canadians would rather see recently defeated Germans allowed into Canada than Jews" (Topper, 1993, p. 259). Citing challenges with acclimatation due to 'weather', Blacks who lived south of the Mason-Dixon line in the United States were regularly declined access to Canada, largely believed to be a fear of inter-racial conflict (Bashi, 2004).

The White Paper of 1967 introduced a point system placing focus on attributes other than race (Taylor, 1991), but it too is not without bias in its scoring of various skills. While much has changed since these racist policies have been repealed, even as recently as the 1999, a public opinion poll, conducted by the Canada Post, Asian immigrants were seen as "gatecrashers", coming into Canada in numbers that many felt were too high (Greenberg, 2000, p. 518). Canada's complex process, requiring significant resources to navigate, continues to favour the privileged. For example, a large focus on educational attainment will prioritize those in countries with access to Western education and the means to attain it etc. These are largely in the global North (Boucher, 2020). Not only is Canada a country 'founded' on the exclusion of immigrants, but it is also one that began with policies designed to control, if not irradicate Indigenous residents, on this land since time immemorial. Surely, progress has been made, some of which is highlighted below, but it is important to pause to reflect on the history upon which this progress has been placed.

Prevalence of Immigrants in Canada

In 2022, nearly one in five Canadians were foreign-born, and, as Canada continues to accept more immigrants, this number is expected to rise (Statistics Canada, 2022a). From 1991-2021, the number of naturalized Canadian citizens has more than doubled (Statistics Canada, 2022a). These numbers suggest that the study of immigrants is the study of Canada and Canadians, regardless of the citizenship status they hold. Canada is a nation of immigrants, with the exception of Canada's First Nations, Inuit, and Metis Peoples. As of 2022, nearly 20%

of the Canadian population reported a birthplace outside of Canada (Statistics Canada, 2022a). Differing classes of immigrants including family reunification, refugee, and economic class admittances accounted for approximately 250,000 immigrants annually between 2001-2010 (Citizenship and Immigration Canada, 2009). Now, over 200 self- defined ethnic origins are present in Canada (Government of Canada, 2015; Statistics Canada, 2022a).

All who apply for permanent residence (landed immigrant status), visas, or citizenship, however, are not guaranteed admission, though there is a robust process in place to determine eligibility to arrive in Canada. Major immigrant classes and requirements for entry are presented below. Typically, before arriving in Canada, a newcomer will apply to Immigration, Refugee and Citizenship Canada. Paths towards permanent residency, and ultimately citizenship can take many forms. While there are many specific, and sometimes less common routes to Canada, the table below outlines the main ones.

Table 1

Major Immigration Classes and Requirements for Entry

Entry Class	Requirements	Other Information
Canada Experience Class	Work experience in the 3 years before application	Express Entry*
Federal Skilled Worker	Ability to be economically independent, work experience and education taken into consideration	Express Entry*
Federal Skilled Trades	Must have skill in specific trades and certification	Express Entry*
Family Sponsorship	Must have family currently living in Canada willing to sponsor	Can be lengthy
Caregiver Class	Must have a job offer in Canada, education, and experience requirements	Often coordinated through an agency.
Government Assisted Refugee	Must meet UNHCR definition of refugee (unable to maintain life and safety due to membership in identify groups in current country (UNHCR, 2022).	Can be lengthy

Private Sponsored Refugee	Must have local support willing to sponsor	Sometimes ineligible for GAR program
Student Visa	Must have offer from accredited program and resources	Time limited to term of study (plus short additional time to find work)

(Government of Canada, 2019)

*Express Entry applications are judged based on their score on the comprehensive ranking scale (CRS), administered by the federal government. Scoring includes points for education, experience, official languages spoken, and age (Government of Canada, 2021). This shows a systematic bias towards healthier, younger, higher educated, better resourced applicants who speak English or French. Some provinces have provincially specific programs where applications can be pulled from any of the traditional fields to be processed faster. (Government of Canada, 2019).

Immigrants, regardless of entry class, arrive at different points of their lives. Potential immigrants are required to provide medical information during the application process (Government of Canada, 2022a). Some may be selected out for residency in Canada due to identified diagnosis, conditions or health barriers that could result in high needs in the short-, or long-term future. Others may be more likely to achieve residency because of other factors (age, education etc.) that are shown to connect to health outcomes (Newbold, 2005; Morassei et al, 2022). Major shifts in the types of immigrants settling in Canada have taken place, especially in the past 30 years, as non-European source country arrivals became the majority (Chui, Tran & Maheaux, 2009; Statistics Canada, 2022a). These non-European arrivals often identify as non-White and not arriving from the Global North, and so, may bring different vulnerabilities than their 'White' counterparts. This group arrives with different networks and

resources, often at a disadvantage relative to those from the Global North, who may have stronger networks and therefore stronger social capital. Due to global inequity and disparities in access to resources, in some parts of the world, access to those 'more connected' can be more restricted, making social movement or mobility more difficult than in those countries with a stronger middle class.

In the decade preceding this one, from 2003-2012, Canada admitted 2,494,550 new permanent residents (PR) (Government of Canada, 2017). In 2016, top source countries for permanent residents were the Philippines, India, China, Iran, Pakistan, United States, Syria, United Kingdom, France, and South Korea (Government of Canada, 2017). Immigration, or rather being born abroad, is a potential risk factor for poor health outcomes, as will be discussed below. This is partly because many of the factors present for immigrants overlap with risk factors present in social determinants of health. These include but are limited to, economic inequality (expensive settlement process, not yet professionally established), racism and xenophobia, education (levels vary around the world), and others. The American National Academy of Medicine notes that medical care alone cannot increase health outcomes (Magnan, 2017). Rather, those factors that make up social determinants of health can be influenced by policies and programs, many of which are directly linked to social work (Magnan, 2017; Spencer & Grace, 2016). Whether determinants are social or biomedical however, health is a central factor in wellbeing.

In a qualitative study of immigrant health care access in Toronto, Campbell et al (2014; p.165) found that "immigrant status was [the] single most important factor affecting both an individual's ability to seek out healthcare and experiences when trying to access healthcare." Rather than other demographic or socioeconomic factors, whether or not a person was born in

Canada or abroad was the variable which had the most effect on the ability to locate and have positive healthcare experiences. The combination of low fertility rates in Canadian born families and high immigration ensures that Canada remains a demographically diverse country for years to come (Dion, Caron-Malenfant, Grondin, & Grenier, 2015; Statistics Canada, 2022). As such, it is imperative to understand the experiences of diverse immigrants so as to unlock the resources and resiliencies of this large sector of Canadian society.

Diversity is a complex notion, even though Canadians maintain that it is at the bedrock of the country's foundation (Winter, 2015). Indeed, the demographics of immigrants to Canada now reflect countries from all over the globe. Canada has increased in diversity annually (Boyd & Vickers, 2000; Statistics Canada, 2022). This increase in diversity, may also mean an increase in vulnerability as discussed above. The current reasons and motivations for migration are varied and often motivated by factors outside of a migrant's control, regardless of immigrant class at time of arrival. They may include an economic downturn, war, scarcity of resources, and other personal motivators. The push and pull of migration are complex and the reasons as varied as migrants themselves, regardless of where they end up settling (Lum, Swartz, Kwan, 2016; Van Hear, Bakewell & Long, 2017; Yan & Anucha,2017). Global inequality is an important factor within the push/pull of global migration. One of the largest pulls to Canada is directly related to the push factor of global economic inequalities and a perception of the perceived relative prosperity of Canada (Van Hear, Bakewell & Long, 2018).

Health Care Utilization

Health care utilization is a protective factor in improved health outcomes, when seekers find the correct services (Hotte, 2018). Unmet health care needs are growing across Canada for all Canadian residents (Newbold, 2005; Wu, Penning, & Schimmele, 2005). While universal health care in Canada seeks to minimize barriers to health care access, many still exist for all, especially immigrants. Research has shown that utilization may be even lower for immigrants than those born in Canada due to lack of trust and familiarity with the system (Newbold, 2005; Newbold 2009; Wu et al., 2005). Other barriers to access include language of practitioner, fear of financial burden, fear of being misunderstood, fear of racism, or not understanding the system. There is a correlation between the risk factors above, and length of time in Canada as more recent arrivals appear to be more vulnerable to these barriers. (Awad & Teixe. 2014; Bajgain et al, 2020; Curtis & MacMinn, 2008; Edge & Newbold, 2013; Kalich, Heinemann & Ghahari, 2016; Luiking,2019; McKeary & Newbold, 2010; Newbold, 2009; Wu et al., 2005). These fears however, do not exist due to a deficit, or reaction from the immigrant, rather these fears are reactions to a system that can place complexities and barriers in the way of those who face vulnerabilities.

It is important to note that applicants may be screened for health conditions /determined "healthy" before arrival, skewing the data to suggest that people come from abroad are generally healthy (Quan et al., 2006; Government of Canada, 2015a). Aery and Mckenzie (2019), show a connection between immigration classes, and healthcare utilization with the highest utilization coming from refugee classes. This is partly explained by the programs and supports offered by the Government of Canada that are of specific assistance to refugee

settlement. This dissertation focuses only on those with landed immigrant (permanent resident) status.

In general, locating health care utilization statistics for immigrants to Canada is difficult as hospitals and other health care centers do not usually collect information relating to citizenship status (Carrière, Peters, & Sanmartin, 2012). Personally identifying health numbers, often used for access to healthcare, do not change with changes in immigration status. Rather, once a number is assigned, it follows a resident from visa to permanent residency through to citizenship (for example). For example, the management of health care coverage in Ontario provides an illustration of the precariousness of immigrant health. The Ontario Health Insurance Plan (OHIP) is managed through the Ministry of Health and Long-Term Care. It covers most basic medical and emergency needs but does not cover prescriptions, dental or eye care unless except in emergencies (Government of Canada, 2009, 2013). Each of these services can be covered by private insurance plans or out of pocket, though both may impose significant expense. This can have major implications for those with low income and those responsible for family members. Statistics Canada points out that, overall, immigrants earn less, have more employers over time, and hold less prestigious jobs compared to those born in Canada (Nwoke & Leung, 2021; Morissette & Sultan, 2013 Turin et al, 2021). These barriers in terms of employment and income also have direct impacts on healthcare utilization, regardless of private or public health coverage.

Dlamini, Nombuso, Anucha & Wolfe (2012) stress that employment for immigrants, especially women is fraught with challenges, including potential racism, and the necessity of previous Canadian work experience. In their study with 35 immigrant women, many used networks to locate work opportunities, but even among these, the work was often far below

their education levels, skills and capacity. When work is precarious, undervalued, based on a wide array of shift times, physically demanding and/or otherwise low paying, this can affect an individual's ability to utilize healthcare, and even effect health outcomes due to the nature and/or insecurity of the work itself. This points to the power of social capital and networking, and also points to the reminder that no network is likely to be strong enough to fix systemic inequality.

Financial and Human Costs of Immigrants in Canada

In 2013, the United Nations cited over 230 million people worldwide living outside of their country of birth, a number that has grown over 50% in less than fifteen years (Akbari & MacDonald, 2014). The recently released World Migration Report, shows that this number has continued to increase worldwide (Mcauliffe & Triandafyllidou, 2021). The government of Canada projects spending over 3 billion dollars to coordinate migration efforts annually (Government of Canada, 2018). Total health care spending in Canada is expected to be over two hundred and fourteen billion, which translates to over six thousand dollars per person annually (N.A, 2015). In 2022, Canada accepted 489,000 permanent residents (Government of Canada, 2023a), Using the calculation above, this equals approximately over $2.5 million dollars, though the actual number would be higher now, as Canada continues to accept increasing numbers of immigrants. In a review of general hospital admissions and census data, it is estimated that the use of hospitals by foreign-born individuals is much higher than for those born in Canada (Carrière et al., 2012), with hospital use being some of the most expensive types of healthcare. Over a billion and a half dollars annually would be spent on health care for permanent residents in 2016 based on the numbers above. For example,

Ontarians are only afforded health coverage through citizenship, permanent residency, or three-month residency (Government of Ontario, 2012, 2014). Some programs offer health coverage for those who do not fall under traditional categories of inclusion, which represent legal migration to Canada. Most formal health services are only available for those have legal status in Canada, creating barriers to access for those who may have arrived without papers, or whose documents have expired etc.However, the Interim Federal Health Plan, designed to meet some of the gaps for those who do not qualify for OHIP, is rapidly changing and reducing healthcare coverage, increasing the vulnerabilities of newcomers (Warmington & Lin, 2014). In short, there are large costs associated with health care in Canada, the burden of which falls to Canadian taxpayers (Government of Canada, 2015a; Government of Canada, 2022a). This cost, of course, is large as it reflects care for all residents of Canada, not just immigrants. Further, immigrants themselves are reflected in the taxpayer base, and so it benefits all to work to reduce healthcare costs on the whole.

As Canada continues to accept more immigrants, the Ministry of Immigration, Refugees and Citizenship Canada will face increased demand for services aimed at supporting the settlement and integration/acculturation process. This process is expanded upon below. In the face of continued federal budget cuts and increasing demands on all public systems, including healthcare, there is a pressing need for alternative solutions to health care provision and the opportunity to ensure a healthy community on the whole. This study offers an exploration of creating, expanding, and supporting social networks as a low-cost factor in protecting health outcomes, as a potentially protective factor for increasing health care utilization. Through connections to others, both formal and informal social support systems may be able to offer extra encouragement in order to increase system utilization. This is at the core of this study,

especially as many of these supports can be pre-existing and organic in nature. This could seem counter intuitive, if healthcare utilization increases, cost to the system would increase as well, though the central goal is to decrease cost on the whole. While this is true, increased utilization of preventative measures, should decrease the likelihood of the need for more significant health interventions (i.e. utilization), down the road, therefore decreasing overall costs.

As Canada becomes increasingly diverse, so too do the healthcare needs of the average Canadian (Government of Canada, 2015c). The Canadian Community Health Survey (CCHS) is administered nationally in order to collect health information on behalf of Statistics Canada. This dissertation will use the CCHS 2017/2018 annual version to explore the central research questions in this dissertation which focus on the potentially protective factor of social support regarding healthcare utilization for immigrants with a focus on time in country. More on the construction and implementation of the CCHS is offered below. It is, however, important to note that the Canadian Community Health Survey does not ask specific questions about different types of citizenship status. Rather, questions about immigration status center on ever being a landed immigrant (Statistics Canada, 2017). A landed immigrant is someone who has permanent residency status in Canada (Statistics Canada, 2014; Statistics Canada, 2022b), and so is often referred to as permanent resident. The following chapters of this thesis offer review of relevant literature on immigrant healthcare utilization and social support for immigrants, followed by a review of gaps. This review is informed by a theoretical framework centered on social capital and cognitive theories. Subsequent chapters include methodology, analysis, results, and discussion. This is done through the lens of relevant socioeconomic factors of those who answered the CCHS 2017/2018, in order to uncover the potentially protective nature of social support on healthcare utilization for immigrants to Canada.

In a study across Canada and the United States, Lebrun (2012) found that immigrants who had arrived in either country sooner, and had limited proficiency in official language, had lower rates of healthcare use. Higginbottom & Safipour (2015) conducted a qualitative study of 12 immigrants in a Western Canadian province. They found that barriers were in place due to a lack of knowledge that impeded access to healthcare. The longer an immigrant is in Canada, the more time they may potentially have to learn and/or connect, increasing the likelihood of healthcare utilization. In a study using CCHS data from 2012, immigrants who were in Canada longer reported having a regular healthcare provider more often than those who arrived sooner (Degelman & Herman, 2016). This was also true in a study of the CCHS 2014 exploring the use of home healthcare services, in which research (Yung, 2022) found that more recent arrivals had significantly less home healthcare utilization. Muggah, Dahrouge, and Hogg (2012) reported that immigrants who arrived in Canada more recently (5 years) were much less likely to report good health than those who were here for over 20 years.

The "healthy immigrant effect" may be relevant here. This concept explains that, on average, immigrants (apart from refugees) arrive to Canada healthier than the average citizen. Over time, however, health status tends to decline to below the levels of Canadian citizens, due to a variety of factors (Aery &Mckenzie, 2019; Degelman & Herman, 2016; Gil-Sameron et al, 2019). The initial discrepancy in overall health status for immigrants versus those who are Canadian born can be attributed to screenings during the migration process. Immigrants are screened for health-related matters before entering Canada, ensuring that in general, public health concerns are minimized and, in most cases, those with serious illnesses are denied entry (with some exceptions for refugees; Vineberg, 2015). Further, those who are able to immigrate

are often more highly educated and or at a higher socioeconomic status than others in their home country, which correlates to stronger health status at arrival (Stewart et al, 2008).

Regarding the decline of health status for newcomers over time, this is connected to the challenges faced after migration, including lower socioeconomic status in Canada, precarious work and stress, possible lack of social support from home, and racism. All of these stressors can contribute to lack of available time and resources for health-related activities including nutrition, physical activity, and of course, engagement with the healthcare system, and are connected to social determinants of health. (Ichou & Wallace, 2019; Lu & Ng, 2019; Nwoke & Leung, 2021; Simich, Beiser, Stewart & Mwakarimba, 2005; Turin et al, 2021; Vang, Sigouin, Flenon, &Gagnon, 2017). This would suggest a greater vulnerability for those who arrived in Canada more than ten years ago, rather than those who have arrived more recently; however it does not account for many potential intrinsic differences between different cohorts of immigrants, including their diverse lived experiences, including social supports. The healthy immigrant effect states that immigrants present with lower perceived healthcare needs closer to arrival, however this does not mean that they are necessarily less vulnerable. Lack of familiarity with the Canadian system, increased distances from support from home, and the tumultuous processes of migration all play into the increase in an actual, real higher healthcare need situation. In the research reviewed regarding the healthy immigrant effect (Lu & Ng, 2019; Vang et al, 2015) healthcare needs were measured by interactions with the healthcare system. Interactions do not necessarily correlate to need due to barriers to utilization, many of which are focused on in this thesis.

In another study (Ahmed et al, 2022), lower income is reported as a barrier to healthcare utilization, even though Canada has universal access to healthcare (at least in theory). This research explains that low income may be connected to precarious work, which is more likely to be done by immigrants. This precarious work may come with inflexible hours, exposure to health risks, and stress. All of these factors can contribute to a decline in health and/or healthcare utilization.

This study is composed of one main research question, a secondary research question, and an additional interactive research question. These questions seek to understand whether or not social support, or length of time in Canada, are protective factors regarding healthcare utilization for immigrants to Canada. The third, interactive question, queries whether the two main predictor variables interact with each other to provide protection regarding healthcare utilization for any specific immigrant groups among diverse immigrants to Canada. Healthcare utilization is represented by three variables, having a regular healthcare provider, having somewhere to go for a minor healthcare need, and having unmet health needs. A relationship between social support-healthcare utilization will be observed while controlling for the potential effects of other established predictors in this field and/or potential confounds. This is all explored through the publicly available data on the Canadian Community Health Survey, 2017/2018 edition. To better understand the choices people, in this case immigrants, make regarding healthcare utilization, it is important to remember that every choice is filtered through lenses of perception and therefore cognition. Cognition, or ways of seeing the world, is also at play in how individuals see those around them who may be of support (Bandura, 2002). An individual's perception decides how much, or how little support any given contact may provide, and how much access that person may have as a direct result of their level of social

capital. In this way, social cognitive theory is a central part of this thesis, and the ways in which it interreacts with social capital theory form the theoretical framework for subsequent analysis.

Social support may provide a protective factor relating to healthcare utilization; the more social support a participant has, the more likely they are to utilize healthcare. Higher social support should translate to having a healthcare provider and having somewhere to go for a minor problem. It should also result in not having unmet healthcare needs. Levels of healthcare utilization will be higher based on higher levels of social support for immigrants to Canada, as interactions with those who provide social support can motivate and facilitate one's attendance in healthcare settings (Gotay & Wilson, 1998; Holt-Lunstad, Robles & Sbarra, 2017; Lee, Arozullah & Cho, 2004). However, this may also work in the opposite direction; if people feel supported and secure (as evidenced by higher levels of social support) perhaps they are less likely to seek support elsewhere, medical or otherwise (Cobb, 1976). Secondly, length of time may be a protective factor regarding healthcare utilization. The longer someone is in the country, the higher their healthcare utilization might be, as they would have more time to familiarize themselves with the systems in their new communities.

Lastly, the less time someone is in Canada, the more protective social support might be in determining their healthcare utilization. This group is, in some ways, more vulnerable than those who have been in Canada longer as they may be less familiar with systems including language, healthcare and community services. In other words, social support may be more important for recent immigrants rather than for those here longer.

In short, this thesis examines the relationship(s) between social support and healthcare utilization for immigrants to Canada, with a focus of length of time in Canada, through the established predictors of healthcare access and utilization. These variables have been chosen

based on reviewed literature as outlined below in Chapter 2 and highlighted based on the relevant theoretical framework as outlined in Chapter 3. Through this literature and theoretical review, a thorough review of the Canadian Community Health Survey (CCHS) is offered, including sample frame and unit, methodology, and analytic strategies used to answer the research questions above. Next, data analysis and review of variables chosen and their relationship(s) to each other will lead to a discussion about the findings of this research. Lastly, this thesis will conclude with limitations as well as implications for future research, education, and practice in the field of social work and beyond.

CHAPTER 2: LITERATURE REVIEW

While there is not a significant amount of research linking social support and healthcare utilization for immigrants, it is important to review the current state of research on the subject, allowing for a recognition of gaps and opportunities for this research to contribute. Specifically, the review of the existing literature below highlights the importance of the study outlined in this thesis and contributes to the potential implications. Social support, as a construct itself, will be expanded upon in later chapters. The literature below summarized studies that are relevant to this thesis, helping to connect social support, healthcare utilization and immigrant healthcare needs.

Main Themes and Gaps in Literature Review

There is little literature that directly references healthcare and social support specifically for immigrants to Canada. A much smaller number of studies exist in the area of social support and healthcare utilization, and even less regarding immigrants. Social support, through personal networks may manifest during stressful life events and/or affect an immigrant's perception of their own capacity to face stress (Chadwick, 2015). One small qualitative study (Lum, Swartz & Kwan, 2016), notes that strong social support raised levels of healthcare utilization as family members could help connect with a family doctor. Simich, Beiser, and Mawani (2003), as well as Este (2013) report that social support is integral for refugee resettlement in Canada. Chadwick and Collins (2015), explain that social support buffer stress and therefore improve health for immigrants to Canada. Though Stewart et al (2010) add that this support is contextual and can vary across communities and cultures. The potentially protective influence of social support on health has been qualitatively suggested in reviewed literature, especially

for vulnerable populations. This study explores this relationship quantitatively through a large national survey of diverse landed immigrants (permanent residents).

Further, the role of ethnicity and immigrant healthcare utilization cannot be discounted. Higher ethnically dense areas have been shown to increase levels of social support, and possible healthcare utilization (Lum, Swartz, Kwan, 2016). Noa and Avison (1996) found that social support can help relieve stress for Korean immigrants to Canada. Conversely, research has shown that immigrating to a place with little existing community from the region or culture of origin can have negative effects on health status (Beiser et al, 2005; Dunn & Dyck, 2000).

There may be racial and cultural variances in reported levels of both perceived social support and healthcare utilization. For example, a large American study showed that Middle Eastern immigrants had significantly higher rates of healthcare utilization than immigrants from the same regions (Elsouhag et al, 2015). The interest in race, ethnicity, and culture of origin points to the possibility of interesting differences in immigrant experiences and utilization based not only on country of origin or culture, but the race and ethnicity alongside country of origin as these variables are not always mutually inclusive.

Lastly, little mention is made of the role of proximity in the provision of social support. Pre-migration, an immigrant may have a personal social support system that can change after migration (Balneaves, et al, 2007). Grossman (1972) explains that health is a central part of human capital. While there is undoubtedly a change in personal support systems, how much is still accessible or reliable after migration has not been examined in the body of literature on social support and healthcare utilization for immigrants. Rather, there is an assumption that previous social networks and relationships are lost and/or created upon arrival. When moving, people may be left behind due to an inability to communicate across physical distance, or

people may drift apart as an immigrant's life changes in context. It is possible, in the digital age, that this assumption is increasingly false. Technology allows connections to remain across great distances in increasingly accessible ways, supports may not diminish, but rather shift in importance. In short, the research literature does not present a full picture of the relationship between social support and healthcare utilization, especially among diverse immigrants to Canada.

Systematic Studies Across Canada and United States

The research studies explored below were located through a review of databases relating to the social sciences, medicine, education, and public health. Rationale for selecting this review of databases was based on identification of relevant disciplines to social work, and the length of time since publication reflects trends and changes in immigration patterns to Canada. While healthcare access and, therefore, utilization is different based on the United States' privatized (mostly) system, as the two countries, Canada and the US neighbour one another, and have similarities in general societal structure, it too was included.

While certainly social support and healthcare utilization rates for immigrants would operate differently in and out of the constructs of socialized medicine, in order to ensure robustness, the United States studies are included in discussions below. Some of the differences in manifestation of healthcare utilization may lie in costs, physical accessibility, types of medical care available and of course, differing immigration patterns. Similarly, British Commonwealth countries with socialized medicine were also added to the review, though results were still few.

Systematic and metareviews can give a good sense of the general state of research in this area, and only two were found. One, did not reference ethnicity or immigrants (Tay, Tan,

Deiner & Gonzalez, 2013), and the other did not specify where immigrants in the study hail from (Schoueri-Mychasiw, Campbell, & Mai, 2013). Each identified a relationship between social support and medical adherence. They also suggested a significant relationship existed between social support and healthcare utilization. The meta-analysis of Tay et al. (2013) noted a large body of research reflecting the intersection of social support and health, having examined over fifty studies in their review.

One meta-analysis of health behavior and social support in this study noted that "[t]he results suggest that social integration (family cohesiveness, marital status, living arrangement) and social (practical, emotional, global) support were related to medical treatment adherence" (DiMatteo, 2004, p.207). Although these systematic and metareviews of healthcare utilization literature and social support are useful in understanding the overall picture of the relationship between healthcare utilization and social support, a research gap exists regarding the unique experiences of diverse immigrants within this relationship. What was also clear in the literature, however, is the significant role that sociodemographic variables may play in healthcare and health. The following section highlights some of these main sociodemographic variables and their relationships to the protective factor of social support and healthcare utilization for immigrants.

Race, Income and Health

Nwoke & Leung (2021), cite a relationship between precarious and demanding work and racialized immigrants, particularly women. This may decrease the ability to access, and therefore utilize healthcare due to the demands of the workplace environment and affect income. They explain that this is especially true for non-White immigrant women. In a study comparing large national surveys in Canada and the United States, Ramraj et al (2016) found

that disparities existed between White and non-White people on both sides of the border. Some of this was mitigated by economic factors, but race played a significant role. In both countries, non-White people had consistently poorer health outcomes than their White counterparts. This study cites significant amounts of research with similar findings. Within Canada specifically, Mahabir et al (2021), show significant experiences of racism within Toronto's healthcare system that likely contribute to lower health outcomes. Turnin et al (2021) directly cite racism as a barrier to access for racialized residents of Canada. Interestingly, Khan, Kobayashi, Lee & Vang (2015) explain that there is a paucity of research that specifies immigration status regarding visible minorities, creating difficulties in determining possible causes for health-related outcomes at the intersections of race and immigration status. Dunlop, Coyte, McIsaac (2000) explain that levels of income can be a factor in the choice to access and therefore utilize medical care, and so it has been included as a variable in this study. These researchers found those with higher income were more likely to attend health care, especially with a specialist, and more likely to do so more than once. However, the literature searched did not uncover research citing the interactions between these variables or their connections specifically to social support and healthcare utilization, and especially with a focus on immigrants.

Education and Health

Public health research speaks to the protective relationship of levels of education and health, in large part as a portion of the social determinants of health(Hahn & Truman, 2015; Prus, 2011, Taylor et al, 2016; Zajacova & Lawrence,2018). Specifically, the higher a persons' education, the higher their health, in general. This is due to a number of reasons. Higher health outcomes for higher education levels can be due to education itself, or due to the connection between education and income, which has also been linked to health outcomes in the same

direction (Hanh & Truman, 2015). The higher a persons' education (in general), the higher paying their job and therefore the more access to resource, including time and ability to connect to healthcare. A higher degree of education can speak to literacy and compliance through a greater understanding of medical information and/or risks of non-compliance. Education rarely takes place in a silo, and so, along with the actual subject matter, individuals learn how to cooperate and interact with others throughout the educational process, making education a protective factor in connection to others. Further, those with higher education can connect to others, resulting in greater social capital, which is connected to health. This is explained in greater detail below. Education is often undertaken before arrival to Canada, making it potentially less applicable to life here. In this way, some of the protective factors of education may be different for immigrants. There is a gap, however, it exploring the relationship(s) between education and healthcare utilization for immigrants.

Loneliness and Health

In understanding the role of social support, it is important to also understand the potential role(s) of loneliness and isolation, potentially present when social support is not. A systematic review conducted by Leigh-Hunt et al (2017), found a significant relationship between social isolation, loneliness, and mortality, especially from cardiovascular causes. As many cardiovascular illnesses can be prevented with detection and care, this speaks to the importance of this study in finding pathways to understand immigrant healthcare utilization. Alcaraz et al (2019), note that this connection exists across both black and white Americans, though the rates of isolation varies per race, with those identifying as Black having higher rates of isolation. In short, loneliness can be a risk factor in the maintenance of good health, both due to lack of support and to increased stress due to isolation. (Holt-Lundstat, 2017; Lim, Eres, Vasan, 2020;

Umberson, Lin & Cha, 2022) . A large meta-analysis found that the risks of loneliness rivals or exceeds risk factors for other major illness known to result in early death (Holt-Lunstad, Smith, Baker, Harris & Stephenson, 2015).

Social Support and Healthcare Choices

When support is present, difficult decisions and actions can become easier. With family cohesion, and/or social supports, people may be more able to face difficult news, undergo challenging procedures or even explore potentially troubling symptoms (Liu et al, 2019). This is true both emotionally and practically, as this support may help with daily activities of living. Among social support types, practical support was most related to medical adherence; patients with low support were two times less likely to adhere to treatments (Tay et al., 2013). Tay et al (2013), also points out the importance of social norms in social support models. In adjusting personal choices to social norms, people may have more access to social support; their actions win the approval of those around them.

This is especially complex for immigrants to Canada whose social norms may change after migration. However, not all positive health behaviours will conform to social norms. Not all social support is positively associated with healthy behaviour, making the link between social support and healthcare utilization not necessarily linear. For example, an individual may remain a smoker because his social circle smokes, but a health condition that is not dictated by behaviours (socially or literally) may occur regardless of the actions and behaviors of their circle. For example, one may become a smoker because of peer pressure, or access to cigarettes, and may even have lung cancer from exposure. Of course, other organic illnesses (other cancers etc.) will appear regardless of the behaviour of peers, but because of internal

factors including genetics etc. While peer, or social circle influence is not a sole factor in determining health, it can be a large one.

The majority of studies reviewed in a large meta-analysis by Tay et al. (2013) focus on health behaviour or outcomes rather than utilization of healthcare systems, and note that studies define social support in a wide variety of ways, using diverse measurements as well. More specifically, there is diversity in whether social support is formal or informal. Informal social supports include family and friends, while formal social supports are more likely to be found through relationships with professionals and formalized programs and services. Another meta-analysis focused on eight studies that described the relationship between social support and cancer screening. The authors noted the heterogeneity of immigrant groups but did not specify the countries of origin of the immigrant women participants in the studies reviewed (Schoueri-Mychasiw et al., 2013). In this study, social support is only one variable mentioned, along with socioeconomic status, access to transportation and resources to pay for healthcare (a United States study), and previous contact with a family doctor.

Both meta-analyses confirm the complexity of the relationship between social support and healthcare utilization and highlight the paucity of research available. Neither of the two systematic reviews specifically focus solely on social support and healthcare utilization for immigrants. Even though one of the two above studies (Schoueri-Mychasiw et al., 2013) references immigrants, there is no clear indication of either how long immigrants have resided in the United States (in this study), or from where exactly they were born. Lastly, the majority of studies in each meta-analysis reviews in the area of this study are over ten years old, creating gaps in their relevance today due to changing socio-demographics and societal systems. Rather, the lessons gleaned from these studies point to the need for more research in this area by noting

social support as a protective factor in healthcare utilization. This study seeks to fill this social support-healthcare knowledge gap among diverse landed immigrants (permanent residents) using a large, national survey.

Sellars, Garza, Fryer, and Thomas (2010) utilized a randomized household survey in the Pennsylvania area of the United States to determine the link between social support, healthcare utilization, and willingness to participate in research studies. This study does not specifically reference immigrants and divides race into binary black/white. It does, however, raise the idea of trust and mistrust as a motivator or barrier to healthcare utilization, namely an ability (or lack thereof) to trust professionals in positions of power regarding healthcare. This has potential relationships to the study of the protective potential of social support and healthcare utilization for immigrants because of the communication about professionals between and within social groups, which may include factors related to trustworthiness or perceptions thereof. Sellars, Garza, Fryer and Thomas (2010) found that a relationship does exist between those who use healthcare and those who are willing to participate in research studies, though the relationship is mitigated by a variety of variables including demographics, self-rated health, and perception of quality of care. This study specifically cites the role of informational support, noting that additional support from social networks can increase trust in professionals and in the process, something that is essential for research to take place.

Shelton et al. (2012) reviewed sociocultural variables in breast and cervical cancer screening adherence among 1,548 Latina women who participated in an educational program. These women come from Mexico, Puerto Rico, Dominican Republic, and other areas od Central or South America. This randomized controlled trial uncovered differences across countries, primarily based on perceptions the women had about others' beliefs towards their

communities. Of all the places of origin, Mexican women most often cited fears of racism or prejudice but also deference to expertise of doctors and nurses. The relevance here is twofold; experiences of healthcare utilization and racism or other discriminatory experiences will be shared with other members of the community, Further, diversity and heterogeneity exist in behaviours, attitudes, and beliefs even within communities with clear similarity, like Latinas. Similar to the results found by the systematic reviews above, neither of these studies focus specifically on social support and healthcare utilization directly. Rather, it is a variable inside of a larger study that includes other demographics of note, like socioeconomic status and country of origin. Regardless of whether or not studies overlapped with this thesis directly, the relationship(s) between power, racialization, and health are evident.

Tamers et al. (2011) researched the role of co-worker support on healthcare utilization across thirty- three different workplaces in Seattle Washington, United States. There is little mention of ethnicity or race (and none of immigration) within this article, though they do note a relationship between social support and doctor visits. Tamers et al. (2011) found that higher social support related to higher doctor visits, though they posit that this is due to greater comfort in taking time from work. This study points to the role of the steps before healthcare utilization. Many decisions are made before attending, or even making a healthcare appointment. For example, before a person sees a doctor, they need to recognize the need, weigh costs and benefit (including work attendance), and then decide (Tamers et al. 2011).

The low number of results above is not to say that the phenomenon of healthcare and immigrants has not been studied. Rather, descriptive studies of immigrant healthcare utilization or outcomes were present, many of which have been included above. Similarly, many studies were located on the themes of social support in general and social support as it relates to

matters other than healthcare utilization, including workplace satisfaction and general life satisfaction studies. The studies above were included based on their focus on social support and healthcare utilization, ideally by Canadian immigrants, though often by general population and into the United States.

In general, greater social support was equated to greater healthcare utilization, though variances in groups point to the need for further study. Further, while healthcare itself may be considered a formal support, few studies delineated between formal and informal supports. This may be due to a specific research interest or focus, or a clear separation between connections made with family and friends and community and outsiders. This is a complicated point as, technically, members of a given community may be the very ones administering healthcare supports, leading to utilization. Some studies reference a strengthening of social support and therefore healthcare utilization after longer residencies in the United States/Canada respectively. Stewart et al., (2008) note immigrant ties to home weakening after time spent in the destination country of Canada. Acculturation (Berry, 2005) may play a factor here, based on whether immigrants choose to integrate or assimilate rather than stay tightly connected to home networks.

The discrepancy between social support pre and post arrival does not mean that social support is weakening, but that immigrants may be seeking support outside of their immigrant circles the longer they are in Canada, through integration. Lastly, the connections between race and/or ethnicity, as well as national origin, may lead to important results. As noted, few of the studies above reference immigrant groups. Those that do reference immigration begin with specific countries of origin as a research focus. A broadening of this area of research is necessary to fully understand the relationship between social support and healthcare utilization

for immigrants to Canada. One such way to better understand this research area is to explore the relevant theories contained within the literature. Social support can be a factor for a wide variety of people in making choices and following through on actions to utilize healthcare. This assertion is tested with a central and interactive research question in this study, notably exploring the potential protective factor of time in country and healthcare utilization, and the interaction of length of time in country and social support regarding healthcare utilization. This research study addresses a gap in literature as it specifically focuses on immigrants in Canada, and the intersection of two potentially protective factors, rather than either alone. Through a large national survey (CCHS), this research makes an important contribution in augmenting understanding of healthcare utilization for a large, potentially vulnerable population. Moreover, it examines a portion of the immigrant experience that could be quite significant, namely, the length of time since arrival in Canada.

There are theoretical similarities across the literature reviewed above. Namely, there is a focus on the roles of perception, and the actions of other community members in making choices about healthcare utilization. Social capital theory can be linked to social cognitive theory which is most present in understanding the effect of relationships on surrounding people regarding decision making and action taking. Many of the studies noted above speak to the intersection of interpersonal and societal factors in the role of healthcare utilization, enforcing the importance of understanding the surrounding contexts that communities find themselves in. Specifically, studies cite inequalities like poverty, racism and other systematic issues which relate to the use of healthcare. In general, these studies point to the need for more study to be undertaken, especially in Canada. The literature presented above offers suggestive qualitative and preliminary quantitative evidence of a potentially protective relationship between social

support and healthcare utilization. This may differ across groups of immigrants, for example those who have arrived in Canada more recently than their longer in country counterparts. Namely, more recent immigrants may be more vulnerable in a number of ways, having shifting social support networks after arrival and may benefit most from strong social support once in Canada. While social support and length of time since arrival has been studied, with some connections to healthcare, none have been found that explore the specific interaction of length of time in country and social support relating to healthcare utilization. This study may help to fill this gap, especially as it will do so while controlling for other previously established predictors, including relevant sociodemographic factors. This research will contribute to this need by exploring the potentially protective factors of social support and time in country specifically for immigrants to Canada, using a large, national database. The following chapter will break down the theoretical construct for this study and expand on the theories contained therein.

CHAPTER 3: THEORETICAL FRAMEWORK AND THEORIES

This study of the relationship between social support and immigrant healthcare is grounded in the research literature, reviewed above. The theories contained in relevant literature which guided the choices of variables to be studied, analyzed and, ultimately, reviewed for implications to social work are offered below. In order to approach the data, and ensuing results with respect for participants and process of inquiry, a theoretical framework guides the approaches not only to variable choices but offers insight into analysis as well. Along with a breakdown of this framework, further explanations of the theories involved are offered below.

At the center of this theoretical framework, and the proposed study is the individual immigrant. Social capital theory, expanded on below, hinges on the idea that people leverage the human resources and capital inherent to those around them to better themselves (Fram, 2003). The individual choice rests on their level of social support, in this case as indicated by scores on the Social Provisions Scale (Cutrona & Russell, 1987). This particular measure of social support is used by the Canadian Community Health Study, of which the 2017/18 database was used for this dissertation.

Social Capital Theory

Social capital theory relies on relationships that have been built by the individual with family, friends, and/or contacts around them. In general, no two interactions, however, are equal. Some interactions have lingering effects, while others may only spring up for a brief point in time. The opportunities that interactions present speak to their power to affect change, in the form of social capital. Social capital is defined as human networks that benefit from

interactions with each other (Cullen & Whiteford, 2001). Further, Putnam (1995) clarifies that this type of capital functions based on trust and cooperation, with a goal of mutual support. This is an important clarification, both actors can benefit from their relationship.

Social capital maintains that the social interactions between people do not arise from nature, and are human made (Fram, 2003). The space occupied by people and communities is made up of interactions between people and groups, through a variety of social constructs (Venkatesh, 1997). People navigate through interactions with others based on social ties and networks created through relationships (Foley & Edwards, 1999). Principles of economics allow for a way to understand social capital. Through interactions (labor), relationships are 'paid into', through which individuals and groups can reap benefits (buying) (Fram, 2003). Individual social circumstance, therefore, is built through personal value of effort paid into various interactions (Coleman, 1988). More specifically, self-efficacy (or effort), as it relates to motivation may be more highly valued in some cultures, rather than others (Schunk & DiBenedetto, 2020). Bourdieu (2011) cites social capital as the reason for unequal access to resources between communities due to discrepancies in access to resources and therefore access to the people that have these resources. The stronger the tie between actors (i.e., family or kin), the tighter the bond, adding to the likelihood of support when needed. This bonding reinforces social norms and can encourage reciprocity in support (Cullen & Whiteford, 2001). Social circumstance and standing play an important role in every stage of life and functioning. Circumstance and standing can vary greatly for immigrants before and after arrival. While this is a subject left for another study, the shift in power based on social networks (both gained and lost) is of note here.

When access to resources, human or material, is available it can greatly benefit those associated with others (Ross, 2002). This hinges on the concept that networks of people can harbor goodwill and trust towards each other and can and do share information (Adler & Kwon, 2002; Inglehart, 1997; Putnam, 2000). Norms and social agreements create the basis of the value of individual standing, actions, or decisions (Coleman, 1988; Grooeart, 1997). The measurement of social capital can be as simple as the amount of people in a social circle communicating and sharing resources and knowledge (Boxman, De Graaf, & Flap, 1991; Kitchen, Williams, & Chowhan, 2012). Adler and Kwon (2002) explain that social capital can refer to both external (structures of the relationships themselves) and internal (relationship with others) factors in communications and lifestyles. Bridging social capital occurs not only within a group but across hierarchies of power. Meanwhile 'bonding' social capital occurs between members at the same power level inside a group (Kawachi, Kim, Coutts, & Subramanian, 2004; Lin, 2002).

Using the imagery of lighting a lamp, differing views exist on whether social capital is the wire itself or the electricity which is carried through it (Szreter & Woolcock, 2004). When people work together for a common cause, each is actualizing their social capital (Fukiyama, 1996; Thomas, 1996). Szreter and Woolcock (2004) recognize the importance of healthy behavior in maintaining health but add that connecting to others and leveraging systems is important in making healthy choices as well. Whitehead and Diderichsen (2001) summarize by connecting strong or high social capital to better health outcomes. The greater social capital, the greater the likelihood of being healthy, defined in terms of both physical and mental health. Lin (2001) summarizes social capital well as an expectation of return when an investment in relationships is made. This happens through an exchange of information, to create influence

and possibly correlate to a sense of identity, either shared or individual. Communication between immigrants and others, both in and out of their communities, can lead to the sharing of information and the making of choices, including the choice to utilize health care systems.

The heterogeneity within and between immigrant groups leads to difficulties in generalizing the role of social capital on the lives of immigrants and their communities (Kazemipur, 2004). This is true due to the nature of the diversities of cultures of origin as well as to the diversity of experiences during the acculturation process, expanded upon below. A small network may be tightly knit and have high levels of social support or be too small to offer significant aid. A large network may have large amounts of social capital or be alienating and hard to navigate. Individual social capital, however, can help individuals feel a sense of connection, augmenting capacity for action (Erikkson, 2011; Na & Hample, 2016).

Relationships of social capital to health care utilization and health-promoting behaviors have been explored through the social determinants of health. The principle of social determinants of health explains that factors like stress, access to work, safety, social support, food, transportation, and other factors can affect health outcomes as much as biology (Dunn & Dyck, 2000; Marmot, 2005). Much has been researched and studied on the theory that health is determined by more factors than individual genetics, but for the sake of this study, we will focus on the role of social support as a determination of health. In a systematic review, Eriksson (2020) explains that many studies show a positive relationship between higher levels of social capital and health outcomes, though this relationship is not consistent throughout every study reviewed. High levels of social support may buffer stress, a factor known to contribute to physical health concerns (Ferlander, 2007; Fiorillo & Sabtini, 2011; Muntaner, Lynch & Smith, 2000).

Further, not all relationships are created equal, and can also cause stress, based on a variety of facts the relationship is not guaranteed to be stress-free and/or positive based on obligation or other pressures (Ferlander, 2007). The central research question in this study is an exploration of protective factors of social support and healthcare utilization for immigrants. Social capital, through social support can help connect people to other resources which can ameliorate quality of life, like work and educational opportunities, and even healthcare utilization.

Relationship to Immigrants

In harnessing social capital, members of groups must have knowledge and access to resources to share, as well as the ability to change their social location within the hierarchy (Fram, 2003; Peckham, 2017; Villalonga-Olives, Wind & Kawachi, 2018). The ethnic enclave environment that many immigrants move into explains the potential for high bonding social capital, but lower bridging capital, outside of their own communities (Lee, 2001; Quadee & Kumar, 2006). Hanley et al. (2018) add that social capital can help uplift immigrant families, though it may take time to form.

McMichael and Masterson (2004) explain that immigrants often have weaker social capital than those born in Canada. This is due, in part, to the length of time they have been in Canada building relationships to each other and therefore social capital. Social capital among immigrants tends to be weak as a result of lower diversity in social networks and reduced access to those outside of their own group, by comparison to those born in Canada (Kuz, 2004). This can act as a disincentive to interact with those born in Canada, as this lack of capital may result in immigrants feeling even further behind in life than their Canadian born peers (Stewart & Anderson, 2008). Ironically it is the reason that networking with those born in Canada may

be especially beneficial. Nonetheless, social capital is an important tool for immigrants who may not have access to as many physical resources as those born in Canada. The power of connection to others can be just as valuable as a tangible resource (Lamba & Krahn, 2003). Nakhaie and Arnold (2010) add that, within the social capital theory, being loved by someone else is especially valuable as it confers the best of access to their resources. When those who love immigrants are abroad or 'back home', the potential to harness local capital is lost. Specifically, connections that could be utilized before arrival are no longer relevant, and so they are unavailable to be capitalized upon.

Social connections, or networks, in the form of social capital, are opportunities to share information and experiences of life in Canada, including the health care system. Social capital is an integral piece in understanding the link between social support and immigrant health care access as it allows a glimpse into the type of information immigrants may be getting from their peers and social connections. Cultural and other forms of health capital are central to this discussion, as the choices and lives of immigrants cannot be disconnected from culture (Holt-Lunstad, 2018; Shim, 2010). It is important to note, however, that members of groups and the groups themselves still need to have the resources with which to connect. Samek et al (2012) report that, while community social capital did not relate to physician visits in their study of over seven thousand residents in Ontario from the Canadian Community Health Survey 2002 and OHIP data, sense of belonging did decrease the amount of doctor visits. In general, increased social capital has been shown to relate to increased health outcomes (Shiell, Hawe & Kavanaugh, 2020; Villalonga-Olives, Wind & Kawachi, 2018). As previously shown through literature that greater outcomes equal greater utilization, this study by Shiell et al (2018) , also supports the protective nature of social capital on healthcare utilization.

The systematic reviews that report this, however, are not consistent in their measurements of those outcomes, most notably whether or not attending a regular medical doctor's office, or having one relates specifically. Rather, it is possible that the stress buffers that social capital offer may connect more directly to increased health outcomes. Social capital alone cannot raise health outcomes. Rather, it can only raise awareness and access to resources such as medical care. The notion of a "'system"' is abstract, and people weave in and out of interactions with different systems regularly. As such, social capital is difficult to place specific boundaries on as it relates how specific groups move about the world (Lynch, Muntaner & Smith, 2000; Sheill, Hawe & Kvanaugh, 2020).

While the potential of social support via social capital can be a strong factor in community interactions, ending the conversation here would place a total onus on communities to heal themselves. Karimi (2020) adds that relying on social capital, and therefore social support alone can hamper efforts for meaningful connections due to inequalities in social capital. One reason for these inequalities in social capital lies in challenges in creating connections, perhaps due to racism. If there is a lot of support for some, and not for others, due to racism, the support available would not in fact, exist for all. Connections can only exist in so far as people need to be willing to make them. Based on perceptions and beliefs about others, these connections may come easier for some, but those at the receiving end of stereotypes such as racism may find connecting across cultures difficult. Intracultural or racial connections are also helpful, but if one is only able to access those who look, sound, believe etc. like them, then their reach may be hampered.

Spencer and Grace (2016) explain that membership of a network may be even more important than membership in a network. Specifically, if those in your network are connected, educated, and comfortable with the healthcare system they will be more likely to encourage you to go seek care. This would indicate strong social capital.

In this way, disparities of network makeup create disparities in healthcare utilization. Therefore, responsibility still rests with larger systems, like the Canadian federal government, to ensure that the resources exist in order to be shared with the groups and communities who need them.

Social Cognitive Theory

In short, social cognitive theory prioritizes the role of others, and is the mechanism by which others may be perceived to hold capital by offering connections and advice (Martin et al, 2014). Specifically, if a contact is present to perform a task perceived as socially supportive, then they must think that the individual and their needs are worthy in their minds. The social cognition of the individual motivates the contact to care or not care in the process of need fulfillment. This worthiness can also be seen as social capital, linking the theories together. It is the social capital held by those in positions of support that also relate to the individual's impetus to action, in this case, health care utilization. An individual choice to act, in this case, to utilize health care, is also affected by feelings of self-efficacy, which can be seen and measured by social cognitive theory. In a meta-analysis of studies measuring the relationship between self-efficacy and health related changes, Sheeran et al (2016) posit that augmenting a sense of self-efficacy can be an effective tool in promoting health behaviours. Simich, Beiser, Stewart and Mwakarimba (2005) remind that social support can be one way of doing so, lending credence to the study discussed in this thesis.

While this dissertation focuses on the protective relationships of individual choices as they relate to healthcare utilization, these choices are not made in a vacuum. Rather, they are related to the community members surrounding individual actors. These community members

may be the very people providing the social support. As such, the two main theories that link individuals to their surroundings will be the basis for variable selection and analysis here. Social cognitive theory is centered around the idea that beliefs and their subsequent actions are formed based on experiencing others' reactions to us (Bandura, 2001). This theory is based on three main situations; where the individual has direct and personal efficacy, where others act as a proxy, and a collective agency when people act as groups (Bandura, 2001). This is directly linked to the idea of "'esteem support"' in which a mirror of positive image is reflected back to an individual from those surrounding him/her (Cobb, 1976). This may be positive, in the case of uplifting others, or negative, in the case of racism or other prejudices which may dimmish the other person in the beholder's eyes. Even internalized racism may be a factor here. In relation to social support and immigrant health care, social cognitive theory is important because it allows for the study of collective agency and the role of group thinking in decision making as decisions are made based on reactions and reflections from the surrounding group (Bandura, 2001). For social cognitive theory, in the context of personal behaviors, expected outcomes may include improved health after the behavioural change or increased ability to enjoy life (Bandura, 2004). Bandura (1986) explains that social cognition is relevant to health-related decision- making through personal, behavioral, and environmental factors. Personal factors include self- efficacy as discussed above and self-regulation, described as the attempt to hold control over personal factors in order to achieve the desired health outcome (Clark & Zimmerman, 2014). Behavioral factors refer to actions and reactions created based on how one perceives the actions and reactions of surrounding people (Clark & Zimmerman, 2014). Lastly, environmental factors include macro influences such as physical environment and

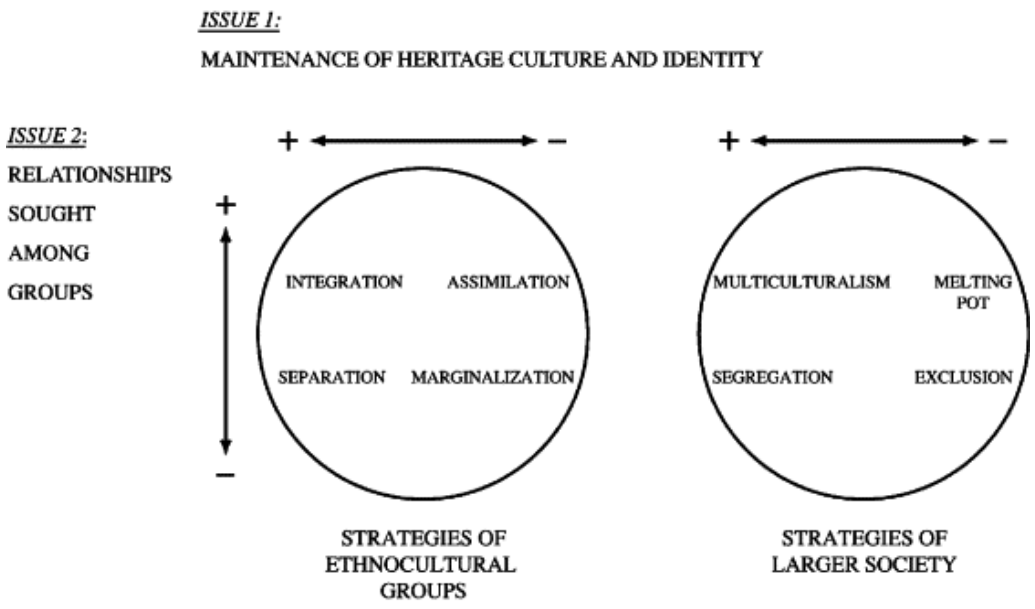
surroundings, including but not limited to social support as explained through the social determinant of health theory (Marmot, 2005).

Relationship to Immigrants

During the process of immigration, much more changes than geography alone. This thesis explores the protective relationship of social support and healthcare utilization for immigrants to Canada, with a focus on the length of time in the country. The months and years following arrival in Canada can be full of transitions, often termed the acculturation process. According to Berry (2006), acculturation is a process of cultural and psychological change that results from the continuing contact between people of different cultural backgrounds (p. 27). This process can vary in time, and is not linear in nature (Berry, 2005). Rather, based on individual and societal factors, can result in different strategies of integration, segregation, marginalization, or separation. The differences in these strategies relate to the degree of separation between the individual and the broader society. Each have different effects on social support both within cultures, families or systems and in relationship to the larger Canadian context. In short, those who engage in marginalization have a negative view of both their own culture and the mainstream culture, while those who have a negative view of their own culture but a positive one of the mainstream culture may engage in assimilation. Both of these approaches could have negative effects on social support as both encourage either isolation, or disconnection from familiarity. Segregation and or marginalization can also be connected to loneliness, which has been shown to have negative health outcomes (Holt-Lunstat, 2018; Holt-Lunstat et al, 2015). Those who feel positive towards their own group but not so towards mainstream society may segregate and those who feel positively towards their own cultural group and mainstream may integrate (Berry, 2005).

Figure 1

Acculturation Strategies (Berry, 2005)



This figure shows the relationship between integration, assimilation, separation and marginalization visually, while placing it in context of the 'host culture'. The choices made by immigrants regarding their acculturation process must be examined while taking the larger societal setting in context. For example, separation happens when people are segregated, and marginalization can only happen when immigrants are excluded, mirroring the isolative effects of both positions. Similarly, when there is full assimilation, the melting pot approach blurs differences, while multicultural approaches encourage integration as a strategy. (Berry, 2005).

Each stage of acculturation can be reflected in social cognitive theory as it based on the perceptions of immigrants of their cultures of origin as well as the receiving culture in Canada. These two strategies may result in greater social support as they indicate positive feelings towards others, both within cultures of origin and mainstream culture. Interestingly, those whose actions corelate with integration, have been shown to report less stress than others in

different stages. This may relate to better health outcomes, and possibly more social support (Berry, 2005). There are some studies that aim to directly connect the acculturation process to health outcomes, but there are too many potential confounds or abstract factors to make a direct correlation (Fox, Thayer & Wadhwa, 2017; Schumann et al, 2020).

The comfort of familiarity of places and people as well as the support they offer also changes. "Cultures are diverse and dynamic social systems, not static monoliths. Intracultural diversity and intra-individual variation in psychosocial orientations across spheres of functioning underscore the multifaceted dynamic nature of cultures" (Bandura, 2002, p.269-270). This diversity is especially complex as cultural identities shift during and after both migration and general life patterns, as explained through the acculturation process.

As acculturation is a subjective process, it is challenging to definitively connect it to utilization in quantitative ways, however knowing that there are connections between immigration and healthcare outcomes (therefore utilization), it is logical that this connection also exists, even if the results are not neatly quantifiable. Further, Social cognitive theory is especially pertinent to understanding the potentially protective relationship between social support and health care utilization for immigrants as it seeks to understand the role of a collective agency on decision-making. Collective (or group) agency explains that a whole is more than the sum of its parts (Bandura, 2001). For immigrants, this includes cumulative life experience that makes up a whole person as well as the cumulative whole of the immigrants' social circle or community. The importance of personal versus collective agency varies across cultures, and so it is important to review theories that discuss the impact of both, as the social cognitive theory does (Bandura, 2001). Bandura (1989) explains that the effects of past experience may take time to manifest into a present decision. Immigrants who have been in

Canada a long time, therefore, may still be acting upon information learned before arrival, even though social structures are different here. Further, actions may be taken based on an individuals' perceived role or status, which is in flux for everyone, but especially for an immigrant pre, during, and post-migration. The interactions between people, and the perceptions and decisions made because of these interactions form the basis of social cognitive theory. Martin et al (2014) explain that change and adaptation are at the core of social cognitive behavior. This is especially salient for immigrants to Canada, who may change and adapt constantly to life in Canada. Harnessing the results and experiences of having social interactions can be a powerful tool in understanding social support itself and its role in health care utilization for immigrants to Canada.

The theories in this study, and the focus of immigrant experiences hinge on perceptions from others, positive or negative, which cannot be extricated from the phenomenon of racism. Experiences of racism are relevant to each of the theories explained above. Social capital theory is related to perceived racism in the way(s) in which group membership allows for movement within social hierarchies; racism inhibits this movement. Further, social capital is contextual in its manifestations, and therefore may vary significantly based on culture and other contexts of lived experience (Karimi, 2020). Social cognitive theory, is also evident in experiences of perceived racism as interactions and behaviours are based upon the reactions and actions seen by others in reacting to an individual, based on a variety of factors, including race. Experiences of racism and discrimination act as reminders of the role(s) of social inequality and intersecting systems/levels of society on the interactions of subjects in these studies. This may be especially relevant when exploring the behaviour and experiences of those born outside of Canada, as many may face racism and discrimination due to memberships in

traditionally disadvantaged groups. Similarly, it is important to remember how systems of power and inequality can inform how networks are created and what networks people (especially the marginalized) may be able to access (Eriksson, 2020). This will be further explored in the implications portion of this thesis.

This study utilized an inductive approach in crafting research questions focused on the protective factor of social support and time in country regarding healthcare utilization. These theories speak to the power of social networks, through capital, and the power of personal perception through social cognition. This points to the importance of social support, and the findings of this research study as important tools in social work service provision.

Social Support

Simich, Beiser, Stewart, and Mwakarimba (2005) define social support as being central to health and wellbeing, especially during periods of life transition (such as immigration). In a World Health Organization report, Wilkinson, and Marmot (2003), highlight that strong relationships contribute to trust and respect, which in turn protect health through the encouragement of healthy choices. Further, they cite research that states that social support helps with speedier patient recovery from illness, and therefore health. One large (n = 24,000) study from Italy reported a significant relationship between strong levels of social support and self- rated health variables (Fiorillo & Sabatini, 2011). Further, social support can be crucial in helping with stressors (Thoits,2011; Uchino, 2009), like symptoms that may require health care-based interventions. This thesis uses the Canadian Community Health Survey 2017/2018 to explore the protective relationship of social support to healthcare utilization for immigrants in Canada. Therefore, in this study, the Social Provisions Scale (Cutrona & Russel, 1987) is used to measure social support.

In creating the Social Provisions Scale (Cutrona & Russel, 1987) authors chose Weiss' (1974) understanding of social support, citing that it encompasses other research about social support through the understanding of guidance as advice and reliable guidance from those who may provide more specific task related support. Weiss acknowledges that there are many different ways that people make sense of circles of support, there are "'reliable associations between types of relationships and their provisions" (Weiss, 1974, p 22). In order for people not to feel lonely and to feel supported, some measure of each of the six provisions are needed at different stages of life (Cutrona & Russel, 1987). Weiss' provisions of the original social support scale are detailed below in the table below.

Table 2

Original Social Support Scale Subscales

Provision of Social Support:	Explanation	Examples
Attachment	Sense of security	Close friendship, spouse etc.
Social Integration	Shared emotions and concerns, companionship	Social networks, memberships in groups.
Opportunity for Nurturance	Responsibility for someone else	Parents, grandparents, familial care.
Reassurance of Worth	Affirming relationships	Colleagues, others who recognize skill and competency.
Sense of Reliable Alliance	'Unconditional support'	Close kin, lifelong friendships.
Obtaining of Guidance	Access to people with expertise.	Authority figures, trustworthy provider of moral guidance.

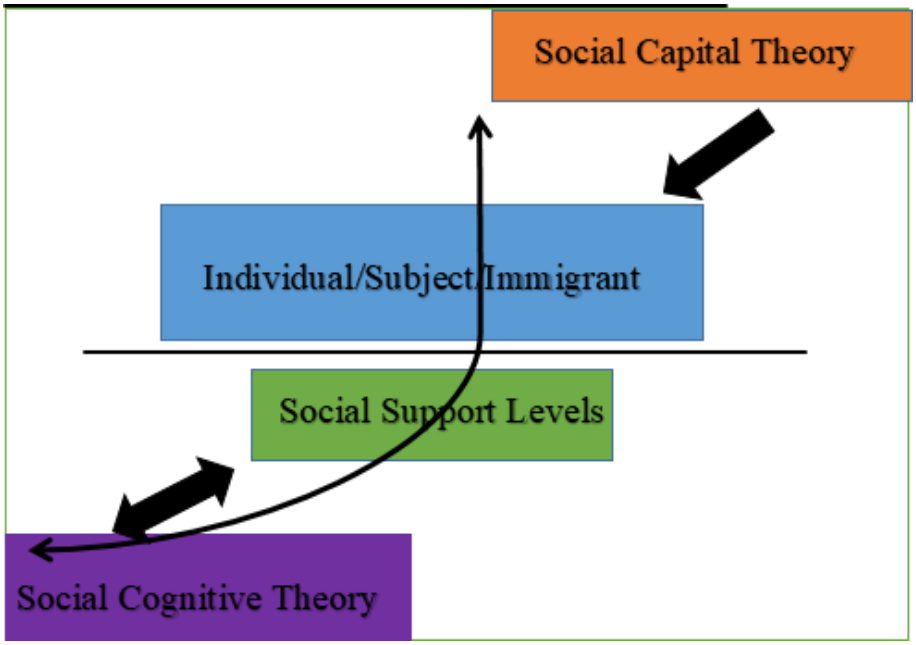
(Weiss, 1974)

In general, immigrants can approach health, and healthcare differently than those born in Canada based on a wide variety of factors, including but not limited to the perception of availability of care, cultural norms around disclosure, and differing definitions of need (and when that need requires intervention). Many of these reasons are connected to social cognition, and knowing the importance placed on social support, social capital can be a motivating factor towards healthcare utilization (Kalich, Heinemann & Ghahari, 2016).

As discussed above, social support hinges on others' presence in our lives and their availability to be of support. They cannot, however, offer support if they do not think that we are 'worthy' of it. Frick, Irving & Rehm (2012) add an important point here, that the subject must have the capacity to create and maintain relevant social connections, which speaks to some level of self-esteem and efficacy, even as a sole actor, as explained by social cognitive theory. This is presented in visual format in figure 2, below.

Figure 2

Theoretical Framework



Research Questions and Hypotheses

This thesis is centered around three research questions: primary and secondary research questions about main predictive associations, and a third research question about the interaction of the two main predictors. Each is presented below with its corresponding hypothesis.

1. Is there a significant association between social support and healthcare utilization among immigrants to Canada?

Hypothesis 1: A protective association will be observed between social support and healthcare utilization among Canadian immigrants. Those immigrants with relatively more social support will have better utilization of healthcare and fewer unmet healthcare needs than will, otherwise similar, immigrants with relatively less social support.

Note. This and each of the three study hypotheses will be systematically replicated or tested across three different outcomes relevant to healthcare utilization: having a regular healthcare provider, having a place to go for a minor health problem, and having had an unmet healthcare need during the past year.

2. Is there a significant association between the length of time in country and healthcare utilization among immigrants to Canada?

Hypothesis 2: A protective association will be observed between the time since their landing in Canada and healthcare utilization among Canadian immigrants. Longer standing landed Canadian immigrants will have higher rates of healthcare utilization and fewer unmet healthcare needs than will, otherwise similar, immigrants who landed more recently. As noted,

this hypothesis will be tested across the three healthcare utilization outcomes of having a regular healthcare provider, having a place to go for a minor health problem, and having had an unmet healthcare need during the past year.

3. Is there a significant interaction between social support and length of time in Canada in predicting healthcare utilization among immigrants to Canada?

Hypothesis 3: A significant social support by time in country interaction will be observed such that the protective associations between social support and healthcare utilization will be significantly larger among more recently landed Canadian immigrants than among more longstanding immigrants. In other words, such social support protections are hypothesized to be greater among members of the more potentially vulnerable population, that is, relative newcomers to Canada. Again, this hypothesis will be tested across the three healthcare utilization outcomes of having a regular healthcare provider, having a place to go for a minor health problem, and having had an unmet healthcare need during the past year. In summary, each of the three study hypotheses will be tested across three healthcare utilization outcomes resulting in a total of nine hypothesis tests.

CHAPTER 4: METHODOLOGY

CCHS Design and Data Collection [Publicly Accessible Version of the Database]

This secondary analytic study uses the 2017/2018 panel of the Canadian Community Health Survey, a powerful, probability sample-based national survey (CCHS, Statistics Canada, 2020). This voluntary survey was conducted by telephone or in-person interviews across Canada using computer-assisted, stratified probability sampling methods. Sample frames were initially based on Statistics Canada's Labour Force Survey, the Canadian phone directory, and health region random dialing frames (Basila, 2016) that were later augmented with random household frames. The CCHS was launched in 2000 after extensive consultations with a wide variety of community stakeholders including policy and health care professionals, medical practitioners, social service providers, and members of the public across Canada (Béland et al, 2000). Beginning as a biannual survey of approximately 130,000 Canadian residents, the survey has been routinely administered annually within and across Canadian health regions to approximately 65,000 residents 12 years of age or older since 2007 (Statistics Canada, 2019). This study, however, focused on respondents who were 18 years of age or older as the focus was on advancing understandings of social support, health care access, and ultimately utilization among adults. Immigrants within the age range of 18 to 64 include emergent adults but not seniors, and this population has been the focus of much research on Canadian immigrants, including numerous national surveys conducted by Statistics Canada (Government of Canada, 2015a). The experiences of youths and senior experiences are left for another study. The CCHS interview guide routinely includes questions about demographic and socioeconomic characteristics of participants and their families, questions about their health-related behaviors and statuses as well as questions about their experiences with healthcare (Statistics Canada,

2016; 2018). Special panels on select additional topics are periodically implemented within smaller, provincial or regional sampling frames.

Those living on First Nations reserve land, full-time armed forces members, and those living in some of Canada's most remote regions are excluded. Those living in collective dwellings like institutions or hospitals are also excluded. This may include youth in care, temporary collective living arrangements like correctional institutions, or rehabilitation facilities. Further, no unhoused people are included in the Canadian Community Health Survey. Still the CCHS represents approximately 98% of the Canadian population over 12 years of age (Beland, 2002; Statistics Canada, 2018). Moreover, random samples of household and eligible persons within households, stratified by province ensure an overall representative national sample (Odesi, 2019). The average time to complete the survey is approximately 50 minutes, and its response rate for the 2017/2018 panel was 62.8% (Statistics Canada, 2020).

Sampling Frame

Data collection took place from January to December of 2017. Approximately three-quarters (74.0%) of the interviews were computer assisted telephone interviews, while the remainder were computer assisted personal interviews (Guertin et al., 2018; Lang, Orpana, Yurkowski, 2019). The survey was delivered in several languages in order to ensure access for many who are not comfortable in English or French (Odesi, 2019). This was particularly relevant to gaining the participation of members of this study's population of central interest; that is, CCHS respondents aged 18 to 64 who report being born outside of Canada (Beland, 2002). Nearly 4,000 such people participated (n = 3,977). Finally, in addition to its restriction on age, the sampling frame for this study was further restricted to people who responded to the Social Provisions Scale (SPS), the measure associated with this study's primary hypothesized

predictor of social support (Cutrona & Russel, 1987). In 2017, the SPS was included in the CCHS's interview instrument in four provinces: British Columbia, Alberta, Newfoundland and Labrador, and Prince Edward Island. Necessarily then, this study's participants all resided in one of these four Canadian provinces.

Measures

The survey instrument continues to be updated by the CCHS Steering Committee and Advisory Board that include experts from the Ministries of Health, the Canadian Institute for Health Information, and Health Canada (Statistics Canada, 2018). This is a first step in minimally assuring the face validity of the operational measures included in its survey instrument. Descriptions of study variables follow. Key outcomes and predictors are presented as well as potentially important covariates. Covariates fall into one of three categories: other established predictors of healthcare utilization in Canada or similar high-income countries, potential confounds (i.e., other "third" variables that through their significant associations with this study's key predictors and/or outcomes might confound its central analyses), and variables indicative of the need for healthcare. Clearly, all such variables ought to be accounted for in testing this study's hypotheses. Selections of key study variables and covariates was also determined by their availability in the CCHS database as well as by their demonstrated criterion validity.

Outcome Variables

Healthcare utilization was assessed with these three measures: having a regular healthcare provider, having a place to go for a minor health problem, and having had an unmet healthcare need during the past year.

Having a Regular Healthcare Provider

This dichotomous variable asked, *"do you have a regular healthcare provider?".* By this, we mean one health professional that you regularly see or talk to when you need care or advice for your health.' While such an indicator of potential access does not guarantee utilization, acknowledgement of having someone to go to implies an important healthcare connection. This measure, or very similar ones, have been used in national Canadian and American surveys for more than a generation. Its predictive and construct validities have been clarified through its consistently demonstrated associations with a host of demographic, socioeconomic, and health-related risk and protective factors (Babitsch et al., 2012).

Having a Place to Go for Minor Health Problem

This dichotomous variable asked, "*is there a place that you usually go when you need immediate care for a minor health problem?"* This question was chosen in order to better understand if respondents have a place to go that is (likely) not a hospital emergency department, where one is more likely to go for a major health problem. Again, acknowledgement of such a usual place to go for a more minor health concern (e.g., a neighbourhood walk-in clinic) may best serve as a proxy for healthcare access, and ultimately, an indicator of potential utilization.

Having Had an Unmet Healthcare Need

This dichotomous variable asked, "*during the past 12 months, was there a time when you felt that you needed healthcare, other than homecare services, but you did not receive it?"* This measure more directly addressed the issue of healthcare utilization, or more specifically, the lack thereof. Those who replied 'yes' to this question at once expressed the need for healthcare

while reporting that they were unable to access and therefore use that healthcare. Research literature has established the construct validity of these three healthcare-relevant measures with many suggestions of their face validity and demonstrations of their criterion validity, both concurrent and predictive (Carrillo et al., 2011; Levesque et al., 2013). Preventative healthcare (at the level of system/doctor intervention) is not universal across all cultures, rather, for some, formal healthcare is only sought after the onset of symptoms, and maybe not even then (Newbold, 2005).

Key Predictors

Social Support

Social support has been relevantly defined as knowing that one is cared for and has access to people who will help in times of stress or need and can even enhance feelings of personal accomplishment (Taylor, 2011). This is shown through the Social Provisions Scale (Cutrona & Russel, 1987), whose questions ask participants whether there are people to depend on, who enjoy social activities, provide emotional security, and offer support. A copy of this scale is provided below in table 1. The Social Provisions Scale (SPS), that was made available in the 2017/2018 panel of the CCHS seemed a demonstrably reliable and valid measure of social support (Cutrona & Russel, 1987). This scale uses the 'name' generator approach, asking about specific people who support the respondent in various ways. While it does not ask for specific names, this approach to asking about social support has been shown to support valid responses (Marin, 2004; Moore & Kawachi, 2017). The ten-item scale was developed from an original pool of 24 items. The shortened version suggestively measures social support concepts with five 2-item subscales: emotional support/attachment, social integration, reassurance of

worth, tangible help/reliable alliance, and guidance (Caron, 2013). A large Canadian study (n = 2,433) found the 10-item scale to be quite internally consistent (Chronbach $\alpha = 0.93$), suggesting its distinct reliability. Furthermore, this version of the SPS scale's validity has been demonstrated through its significant associations with a host of other social support and health measures in predictable ways (Orpana et al., 2019). However, alpha scores for the subscales ranged from only 0.53 to 0.69, distinctly substandard reliability criteria. Notwithstanding the fact that no specific hypotheses had been developed involving its subscale concepts, the overall, highly reliable, 10-item scale was used in this study. Finally, a French version of the 10-iten scale has also been validated and has been translated into a number of other languages (Lang et al., 2019; Weiss, 1987). SPS items are displayed in Table 1 as a final demonstration of its face validity through naturalistic observation.

Figure 3 Ten Item Social Provisions Scale (Cutrona & Russel, 1987)

There are people I can depend on to help me if I really need it.
There are people who enjoy the same social activities I do.
I have close relationships that provide me with a sense of emotional security and well-being.
There is someone I could talk to about important decisions in my life.
I have relationships where my competence and skill are recognized.
There is a trustworthy person I could turn to for advice if I were having problems.
I feel a part of people who share my attitudes and beliefs.
I feel a strong emotional bond with at least one other person.
There are people who admire my talents and abilities.
There are people I can count on in an emergency.

Note. Each item is assessed with a 4-point Likert scale, ranging from strongly disagree to strongly agree.

Response choices for each SPS item are: strongly disagree (1), disagree (2), agree (3), or strongly agree (4). Therefore, the scale's theoretical score range is 10 to 40, with a 'high level of social support' having been assigned to those who score 30 or higher. This categorization was based upon previous validating studies (Orpana et al, 2019; Taylor, 2011; Yang et al, 2017). As will be seen, the vast majority (88.1%) of this study's respondents scored in this categorical 'high social support' range. Therefore, those who did not score that high (10 to 29) were categorically defined as 'low' and set as the baseline for comparisons. In order to describe and explain social support variability among this study's sample of immigrants, in a more nuanced way, the category that was initially defined as high (30-40) was more precisely categorized as experiencing moderate/medium/mid-levels of social support (30 to 34) or a truly high level of social support (35 to 40).

Length of Time in Country

The other main predictor in this study is the length of time in country. The relevant CCHS question asks, *"in what year did you first become a landed immigrant in Canada*?" A number of previous studies consistently found that immigrants, predominantly from low to middle-income countries to Canada or other high-income countries were more likely to access and use a variety of health and other human services the longer they had been in country (Degelman & Herman, 2016; Ravichandrian et al., 2022; Saleem et al,, 2019; Setia et al, 2011; Siddiqui et al, 2016). This supports the construct validating inclusion of this variable for study here. It ought to be noted, though, that this study does not merely propose a systematic replication of this variable's main association with healthcare utilization. Rather, this study originally hypothesizes a moderating effect on the social support-healthcare utilization

relationship. The public version of the CCHS which this study used due to COVID-19 pandemic-relevant constraints, only allowed for the following two categorical responses: landed less than ten years ago, or ten or more years ago. These then are the two moderating strata to be examined in this study. Finally, a landed immigrant is defined as someone who has permanent residency status, which can take place sometime after arrival in Canada. Even if landed immigrant (permanent resident) status was achieved after arrival, time of emigrating and landing are strongly associated with each other; it is not possible to be a landed immigrant before arrival, and therefore this variable is still a measure of the length of time in country. This study, therefore, labels this variable 'Length of Time in Country'.

Covariates

This study centered on the two main social support predictors and three healthcare utilization outcomes described above. However, people are complex beings made up of diverse sociodemographic identities. In certain instances, even these sociodemographic differences may explain variations in social support and/or healthcare access and ultimately, utilization. Such covariates fall into one of three categories: other established predictors of healthcare utilization in Canada or similar high-income countries, potential confounds (i.e., other "third" variables that through their significant associations with this study's key predictors and or outcomes might confound its central analyses) and variables indicative of the need for healthcare. Furthermore, these covariates may fall into one of the following general categories: demographic, socioeconomic, and residential characteristics as well as indicators of general health status which may serve as proxies for one's need for healthcare variable. Such relevant covariates available in the CCHS are described next.

Demographic Variables

Age

Regarding age, the CCHS asks, "*what is your date of birth*". This study included people between the ages of 18 and 64, including all those who are legally defined as adults, but not yet seniors (Statistics Canada, 2017). This definition has also been used in predictable ways by other health and healthcare researchers using CCHS data (Hotte, 2018; Laroche, 2000). To facilitate meaningful life space comparisons, the age variable was categorized as follows: 18 to 24, 25 to 44, and 45 to 64 years of age, generally corresponding to young adults, independent income-earning adults and middle-aged adults (Arcadia et al., 2011; Kimbro, 2009; Teruya & Bazargan-Hejazi, 2013). In general, with increased age comes increased healthcare utilization, and age is a central defining factor in many life choices. In this way, age is both a sociodemographic factor, and potentially one that could fall into the area of 'need' defining regarding healthcare utilization. Another measure of the need for healthcare, general health status, is presented in later in the thesis.

Sex

CCHS's interview protocol simply dichotomized sex as "*female or male*?" In certain contexts, men have been observed to have higher healthcare utilization rates, but not always (Saleem et al., 2019). Umberson, Lin & Cha (2022) found that, while women report feeling more isolated, there are greater impacts of this isolation on men and boys. Like age, sex warrants routine accounting in any study of health or healthcare utilization.

Race

The CCHS asked about cultural or racial background as follows: "*You may belong to one or more racial or cultural groups (on a large given list). Are you…?"* The publicly accessible database, however, simply dichotomized this variable as white or non-white (including Indigenous Peoples). While public access to healthcare is a point of great pride for many Canadians, certain racial disparities seem to persist despite Canada's claim to 'universal access' to medically necessary healthcare (Martin et al, 2018; Siddiqui et al., 2016). Moreover, various forms of social support are well-known to vary considerably across diverse racialized and cultural groups (Almeida et al., 2011; McCarthy, 2000; Yan & Anucha, 2017). Therefore, like age and sex, race ought to be included in any study of health or healthcare in North America.

Language

The CCHS asks, *" what language do you use most often at home"* and the publicly available database offers responses of English (no French), French (no English), both English and French spoken at home, or neither English and French spoken at home. Because the majority of healthcare in Canada is provided in one of the two official languages, this study dichotomized the language measure as follows: English or French is spoken at home or neither English nor French is spoken at home. Not surprisingly, much research has found significant associations between language, culture, social support and healthcare access and utilization thus, the importance of accounting for language in this study (Ahmed et al, 2016; Deri, 2005; Higginbottom & Safipour, 2015, Kalich et al., 2016; Newbold, 2009; Ng et al., 2011; Okrainec, Booth, Hollands et al, 2017; Saleem et al., 2019; Statistics Canada, 2001; Wu et al., 2005).

Residential Variables

Province of Residence

As noted previously, the SPS was only included in four provinces in the 2017/2018 panel of the CCHS: British Columbia, Alberta, Newfoundland and Labrador, and Prince Edward Island (Statistics Canada, 2018). But only 21 people from the maritime provinces of Newfoundland and Labrador participated. Therefore, they were combined with the participants from Prince Edward Island into a single category for this study's analyses. The ebb and flow of provincial political tides can affect healthcare funding and so its quality and Canadians' satisfaction with the care they receive (Samuelson-Kiraly et al., 2020); therefore, it will be accounted for.

Marital Status

The CCHS asks the question "*what is your marital status? Are you single/never married, married or common law, divorced, separated, or widowed?"* Marital status was recoded as follows: married or common law or not as an indicator of having an intimate partner who may provide close familial support. Again, research has directly linked such familial partnerships to health and healthcare utilization (Hotte, 2018; Robles et al., 2014), but in certain contexts (for example, under conditions of marital strain) to health risks and healthcare barriers (Umberson et al 2006). Therefore, the potential importance of extending residential definitions beyond mere marital or cohabiting statuses to household size as listed below. In a meta review of American based studies of medical compliance, DiMatteo (2004) found that married people were more likely to have high levels of medical compliance. This effect on adherence was also found to be higher for those living with other adults (not just a spouse).

Household Size

During CCHS interviews, household size is asked about when rostering the household. This process includes taking demographic information about each person in the household. The variable was distilled into to how many people live with the respondent. This variable may augment marital status. Specifically, marital or common law statuses assume support from a spouse or partner, but that may not always be the case. Furthermore, being unmarried or unpartnered does not necessarily mean living alone. As such, the variable household size was added to extend understanding of the effects that others in the home may have. Household size categories were recoded as follows: lives alone, with one other person, or with two or more other people.

Socioeconomic Variables

Household Educational Attainment

As there are ties between education and income, the CCHS collected educational data during household rostering at the beginning of the survey. The public access database defined three categories of educational attainment: having less than a secondary education, completed one's secondary education, or having had any post-secondary education. Education has been directly linked to health outcomes and social support worldwide, noting that higher education often equates to better health outcomes, and so will be accounted for (Denton et al., 2004; Godley &Tang, 2022; Raghupathi & Ragupathi, 2020; Veenstra & Vanzella-Yang, 2021).

Annual Household Income

The relevant CCHS question was "*What is the total annual household income from all sources*?" Then the original five categories were recoded into four in the interest of statistical power and practical analysis (e.g., the lowest category now roughly corresponds to Statistics Canada's (2020) low-income criterion for a family of three to four: less than $40,000 annually, $40,000 to $59,000, $60,000 to $79,000, or $80,000 or more annually. Very similar to education, household income or lacks thereof (e.g., low-income status or living in poverty) have been inversely linked to health and social support worldwide as well as to lack of healthcare utilization in Canada and around the world (Asada & Kephart, 2007; Bajgain et al., 2020; Block et al., 2011; Curtis & MacMinn, 2008; Denton et al., 2004; Godley & Tang, 2022; Osei & Gorey, 2020; Penning & Zheng, 2016; Raghupathi & Ragupathi, 2020; Veenstra & Vanzella-Yang, 2021). Such measures of socioeconomic status are important to be accounted for in any study of healthcare in a high-income country like Canada.

Need Variable

Self-Reported Health Status

Along with age, self-reported health status was included here to account for the estimated need for healthcare. Practically, those who report their health as very good or excellent probably have much less need for healthcare than those who report their health as fair or poor. The Canadian Community Health Survey's relevant measure was operationalized with this question: *"In general, how would you say your health is now?"* Again, in the interest of statistical power, the original five categorical response options were recoded into four:

excellent, very good, good, and fair/poor combined. Less than three percent of this study's participants reported their health status as poor.

Along with this being a straightforward and generally recognizable question, research has shown it to be an increasingly good marker of health and healthcare needs (Fiorillo & Sabitini, 2011; Ng et al. 2011; Schnittker & Bacak, 2014; Yang & Hwang,2016). Though only a single item measure, self-reported or subjective health status has been found to have validity in predicting help seeking behaviors, physician visits, and health care utilization (Bowling, 2005; Miilunpalo et al., 1997; Shields & Shooshtari, 2001). In addition to its use in Canadian surveys, general self-reported health has been used in USA surveys and there, also observed to be associated with diverse risks and protections among general and vulnerable populations in predictable ways (Gonzales et al., 2017). Its substantially demonstrated construct and predictive validities provide assurances that this study's groups will be of similar health statuses and so have similar needs for healthcare when comparing them on healthcare access and utilization outcomes.

Analytic Methods

Descriptive Statistics and Bivariate Analyses

Univariate frequency displays were created for all of the study variables to fully describe the study sample: key predictors, outcomes, and all covariates. All variables in this study were categorical, so the testing of parametric assumptions was unnecessary and so not included (means, medians, standard deviations and measures of skewness, kurtosis were not reported). Important bivariate analyses were run to describe key study subsamples (e.g., longstanding versus more recently arrived/landed immigrants to Canada) and to observe the simple,

unadjusted bivariate relationships between all of the possible predictors and each of the three healthcare outcome variables before building final multivariable regression models. The statistical significance of all bivariate relationships were tested with two-tailed, nonparametric Pearson's chi square (χ^2) tests, all minimally with an α criterion of 0.05 ($p < .05$).

Multivariable Analyses

In order to test hypotheses, logistic regression models were run across the three binary outcome variables representing healthcare utilization (Caldwell, 2007; Hosmer, et al., 2013; Vittinghoff et al., 2012). The steps below outline the process of building regression models that were replicated across each of the three healthcare outcomes.

1. Each predictor (key predictors and all covariates; established predictors, potential confounds and/or indictors of healthcare needs) was entered as a lone predictor into a simple logistic regression on the binary healthcare outcome. These essentially examine bivariate relationships and are displayed in Tables 8 and 9 (models 1 to 12) and in Table 10 (models 1 to 11). Province was not included in the regressions on unmet healthcare needs (Tables 10 and 11) for a lack of statistical power due to the quite small sample of only 96 participants in the combined subsample of Prince Edward Island and Newfoundland and Labrador. These models examined the unadjusted associations of each predictor with the healthcare outcome.
2. Then, in each instance of predicting one of the three healthcare utilization outcomes, a full multivariable prediction model was run. All of the predictors were entered together into each of these as main associations only (no interactions were yet entered) allowing for estimation of the independent contribution of each predictor on the healthcare utilization outcome of interest. In other words, the effect of each predictor was adjusted for the independent contributions of all of the other predictors.

3. Finally, full models that included the hypothesized interaction term (social support by length of time in country) were then built. Again, these accounted, adjusted or controlled for all of the other predictors. Only significant interactions were included in each of the final three regression models. Any significant interactions were depicted in a separate table (Table 12). Logistic regression model outputs produced odds ratios (ORs) and their 95% confidence intervals (CI) derived from regression statistics ($OR = e^{\beta}$ and $CI = e^{\beta +/- 1.96(SE)}$). These estimate the practical and statistical significance of predictor-outcome relationships. For example, an OR of 3.00 (95% CI 2.80, 3.20) corresponding to the fully adjusted comparison of participants aged 45 to 64 with much younger participants, aged 18 to 24 on having a regular healthcare provider could be interpreted as follows. The older participants were estimated to be three times as likely as otherwise similar younger participants to have a regular healthcare provider, a finding of clear practical significance. Additionally, this finding would be deemed statistically significant as well, as confidence intervals that do not include the null valve of one (i.e., OR = 1.00) are indicative of statistical significance at $p < .05$.

Power Analysis

G*Power software was used to estimate the power of this study's central analyses (Faul, et al., 2007; 2009; 2013). Given the sample of 3,977, 12 predictors in regression models, the standard two-tailed α criterion of 0.05 (less than 5% chance of making a type 1 error), and the anticipated ability for models to account for 10% of the criterion or outcome variability (i.e., a small association [$R^2 = 0.10$; Cohen, 1988]), the post hoc power calculation estimated this study's analytic power to be .85 or 85% (less than 15% chance of making a type 2 error). This is above or better than the fairly standard criterion of .80 or 80%.

Multicollinearity

While parametric assumptions are not relevant due to the binary nature of this study's outcome variables and the categorical nature of all of its predictor variables (that is, it is not a linear model), multicollinearity was extremely unlikely, but still needed to be ruled out. All of the categorical/binary bivariate associations (i.e., all possible predictor-predictor associations) were converted to Pearson's correlation coefficients from their calculated chi square values ($r = [\chi^2 / N]^{½}$, Cooper, 2017). To be problematic in terms of diagnosing a problem with multicollinearity, correlations would minimally need to have been in the range of .70 to .90 or greater. None even approached .50. Finally, all analyses were accomplished with SPSS software, version 28 (IBM Corporation, 2020), and the goodness of regression model fits were tested with its Hosmer and Lemeshow's test.

Missing Data

There was very little missing data in each of the outcome variables (0.2%). Most of the predictors also had little to no missing data (all less than 3.0%). The one exception was the computed Social Provisions Scale (SPS) score which had 5.8% missing data. The missing data were completely at random for each regression model based upon a null result of Little's missing completely at random (MCAR) χ^2 tests (Little, 1988). Therefore, missing data was deleted listwise in all models reported here. For additional conservative analysis, all models were systematically replicated after imputing all missing data (Lall, 2016). The practical and statistical significance of the findings did not change substantially. Most of the differences between the listwise deletion and imputed models were in the range of hundredths of a decimal place. Imputed models are displayed in Appendix A.

CHAPTER 5: RESULTS

Sample Description- Univariate Descriptions

The central research questions in this thesis focus on the possible protective relationships between social support and healthcare utilization among Canadian immigrants, using the CCHS 2017/2018. It is necessary to understand who these immigrants are, descriptions of each variable-including sociodemographics- are offered below. This is a study of a unique group of people: Canadian immigrants between the ages of 18 and 64 who responded to specific questions within a national survey. This section describes them it sets the limits of this study's generalizability. Demographic characteristics of the 3,977 participants are displayed in Table 3.

Table 3

Demographic Characteristics of Participants (N = 3,977)

Variable Categories	Sample Size	Valid Percent
Age		
18 to 24	266	6.7
25 to 44	1,856	46.7
45 to 64	1,855	46.6
Sex		
Men	1,818	45.7
Women	2,159	54.3
Race		
White	1,212	30.7
Non-white	2,739	69.3
Language spoken at home		
English or French	2,548	64.3
Neither English nor French	1,413	35.7

Note. Race (0.7% missing), language (0.4% missing).

This sample of immigrants only included a very small subsample of young adults between the ages of 18 and 24 (6.7%), being much more highly represented by older cohorts up to the age of 64, with women (54.3%) being slightly better represented than men. Unsurprisingly, given that this study's immigrant participants were all born outside of Canada, seven of every ten of them identified as non-white (69.3%) racialized group members. Similarly, over a third of the sample reported speaking other than one of the official languages at home. This description suggests a certain demographic vulnerability, certainly more so than found among the Canadian population as a whole. As for residence, by design the sample was restricted to immigrants living in British Columbia, Alberta, Prince Edward Island and Newfoundland, as only these provinces were asked the social support related questions relevant to this study. Most typically they were married or common law living in households with two or more other people (Table 4).

Table 4

Residential Characteristics of Participants

Variable Categories	Sample Size	Valid Percent
Province		
PEI & NFLD	96	2.4
Alberta	1,731	43.5
British Columbia	2,150	54.1
Marital Status		
Married or common law	2,642	66.6
Not married or common law	1,324	33.4
Household Size		
Lives with two or more	2,076	52.3
Lives with one other	1,085	27.3
Lives alone	811	20.4

Note. PEI, Prince Edward Island; NFLD, Newfoundland and Labrador. Marital status (0.3% missing), and household size (0.1% missing).

Table 5

Socioeconomic Characteristics of Participants

Variable Categories	Sample Size	Valid Percent
Household Educational Attainment		
Any postsecondary	3,295	85.3
High school graduation	441	11.4
Less than high school	125	3.2
Annual Household Income		
$80,000 or more	2,067	52.1
$60,000 to $79,999	539	13.6
$40,000 to 59,999	560	14.1
Less than $40,000	805	20.3

Note. Education (2.9% missing), annual household income (0.2% missing).

Table 6

Self-Reported Health Status of Participants

Variable Categories	Sample Size	Valid Percent
Self-Reported Health Status		
Excellent	1,009	25.5
Very good	1,415	35.6
Good	1,183	29.8
Fair or poor	366	9.2

Note. Self-reported health status (0.1% missing).

The sample, overall, showed high educational achievement, 85% of the participants reporting that they had some postsecondary education in their household (Table 5). This seems consistent with their incomes, with over half of them reporting annual household incomes of $80,000 or more in 2017. However, the lowest income quartile of less than $40,000 per household of most typically three or more people was also well represented (20.3%). This may point to intergenerational, or otherwise shared housing.The self-reported health status of this sample of Canadian immigrants seemed to follow a similar pattern (Table 6). The vast majority

of the sample felt that their health was good or better, but a not insignificant minority reported their health status to be only fair or poor (9.2%). In aggregate, this study's sample contains socioeconomic and health diversity. The majority of the sample's description seems consistent with relative socioeconomic and physical health, consistent with the healthy immigrant effect (Vang et al., 2017), while substantial numbers seem to tell a story of people seeking refuge, suffering certain socioeconomic and health vulnerabilities.

Table 7

Social Support, Length of Time

Variable Categories	Sample Size	Valid Percent
Social Provisions Scale Scores		
Low (10 to 29)	449	12.0
Mid (30 to 34)	1,601	42.8
High (35 to 40)	1,695	45.3
Length of time In Country		
10 or more years	2,614	65.7
Less than 10 years	1,363	34.3

Note. Social Provisions Scale scores (5.8% missing).

As for this study's key predictor of social support, indexed by scores on the Social Provisions Scale (SPS) (Cutrona & Russel, 1987), the above noted pattern seemed to persist (Table 7). The majority of the sample had relatively high scores on the SPS. In fact, nine of every ten of this study's participants scored in the range of 30 to 40 (92.1%), a range that had previously been discriminately validated as "high" (Orpana et al., 2019). Approximately ten percent seemed more potentially vulnerable, scoring relatively "low" on the SPS and so probably having a weaker and less instrumentally supportive social support network. Table 7

also shows that about two-thirds of this study's participants landed in Canada approximately a decade or more ago, while the other third of them landed more recently.

Binary frequency distributions of this study's three outcomes, which represent healthcare utilization are displayed in Table 8. The three outcome variables representing relative lack of healthcare utilization were as follows: did not have a regular healthcare provider (19.1%), did not have a place to go for a minor health problem (9.6%), and essentially reporting that one had a health problem or healthcare need, but was unable to have that need adequately addressed (2.0%). These suggest healthcare access inadequacies and ultimately, barriers to healthcare utilization of between two percent and 20% among study participants. That is, one of every five to fifty Canadian immigrants may be so affected. They represent large populations of people probably presently not adequately served by the Canadian healthcare system.

Table 8

Healthcare Utilization of Participants

Variable Categories	**Sample Size**	**Valid Percent**
Has regular healthcare provider		
Yes	3,211	80.9
No	758	19.1
Has place to go for minor health problem		
Yes	3,589	90.4
No	379	9.6
Unmet healthcare need		
Yes	78	2.0
No	3,892	98.0

Note. All outcomes had 0.2% missing.

Bivariate Descriptions of Relative Newcomers versus Longer Standing Immigrants

Two of this study's hypotheses, the main and interaction hypotheses that involve the length of time in Canada, are based upon the hypothesis that, in certain ways, those immigrants who landed more recently, that is, less than 10 years ago, are a relatively more vulnerable group. The challenge of setting up multiple systems at multiple times, adjusting to new systems and ways of life, possible language barriers, and larger systemic barriers of racism may all contribute to this vulnerability.

These bivariate descriptive analyses, comparing them with those who landed 10 or more years ago, strongly support this. First, the relative newcomers were more likely to be young adults, less than 25 years of age (10.7% vs 4.6%). Second, they were less likely to have had some postsecondary education (82.9% vs 90.1%) and less likely to have annual household incomes of $80,000 or more (47.4% vs 54.5%). Third, the new(er) comers were more likely members of a racialized minority group (81.3% vs 63.1%) and to speak a language other than English or French at home (46.3% vs 30.2%). But fourth, and interestingly, despite their apparent demographic and socioeconomic vulnerability, the healthy immigrant effect still seems to be operating here. The newer immigrants were more likely than those who landed 10 or more years ago to report their health as excellent (32.6% vs 21.6%), and only about half as likely to report their health as fair or poor (5.0% vs 11.4%). All of these bivariate comparisons met this study's minimum statistical criterion of significance ($p < .05$). In fact, they were all significant at $p < .001$.

Findings of Multivariable Analyses: Hypothesis Tests

Predictors of Having a Regular Healthcare Provider

The results of the three regression-based hypothesis tests on the outcome of having a regular healthcare provider are displayed in Table 9. All three were supported. Strong support for the first hypothesis of a protective association of social support is observed at the top of the table. The unadjusted model 1 suggested such protection. But then, model 13, that was fully adjusted for all other of the established predictors and potential confounds observed very strong support for this hypothesis. Those immigrants scoring in the mid- and high ranges of the SPS were, respectively, estimated to be 44% (OR = 1.44, 95% CI 1.09, 1.91) and 34% (OR = 1.34, 95% CI 1.01, 1.79) more likely to have a regular healthcare provider than were immigrants scoring relatively low on the social provisions scale (Cutrona &Russel, 1987). Please see table 9 below.

Table 9

Predictors of Having a Regular Healthcare Provider: Logistic Regression Models (N = 3,587)

Predictors	Model 1 to 12		Model 13		Model 14	
Categories	OR	95% CI	OR	95% CI	OR	95% CI
Social Provisions Scale						
Low	1.00	…	1.00	…		
Medium	1.31	1.01, 1.70	1.44	1.09, 1.91		
High	1.15	0.89, 1.34	1.34	1.01, 1.79		
Length of Time In Country						
10 or more years	1.00	…	1.00	…		
Less than 10 years	0.48	0.41, 0.57	0.60	0.49, 0.73		
Age						
18 to 24	1.00	…	1.00	…	1.00	…
25 to 44	1.70	1.28, 2.23	1.39	0.98, 1.96	1.41	1.00, 1.98
45 to 64	3.36	2.52, 4.84	2.69	1.83, 3.95	2.83	1.95, 4.12

Health Status						
Excellent	1.00	…	1.00	…	1.00	…
Very good	1.26	1.04, 1.53	1.17	0.95, 1.45	1.15	0.93, 1.41
Good	1.71	1.39, 2.12	1.45	1.14, 1.85	1.44	1.14, 1.82
Fair or poor	2.59	1.81, 3.71	2.26	1.49, 3.42	2.12	1.43, 3.13
Sex						
Male	1.00	…	1.00	…	1.00	…
Female	1.56	1.33, 1.82	1.64	1.38, 1.95	1.68	1.42, 2.00
Race						
White	1.00	…	1.00	…	1.00	
Non-white	0.99	0.84, 1.18	1.05	0.86, 1.30	1.03	0.84, 1.26
Educational Attainment						
Any postsecondary	1.00	…	1.00	…	1.00	…
High school graduate	1.19	0.92, 1.55	1.30	0.96, 1.74	1.36	1.02, 1.81
Less than high school	1.36	0.83, 2.22	1.42	0.79, 2.53	1.23	0.72, 2.10
Annual Household Income						
$80,000 or more	1.00	…	1.00	…	1.00	…
$60,000 to $79,999	0.74	0.58, 0.94	0.82	0.63, 1.07	0.78	0.60, 1.01
$40,000 to $59,999	0.81	0.64, 1.03	0.83	0.64, 1.09	0.82	0.64, 1.07
Less than $40,000	0.61	0.50, 0.74	0.65	0.51, 0.83	0.63	0.50, 0.80
Language Spoken at Home						
English or French	1.00	…	1.00	…	1.00	…
Neither English nor French	1.22	1.03, 1.44	1.32	1.08, 1.61	1.26	1.04, 1.53
Marital Status						
Married or common law	1.00	…	1.00	…	1.00	…
Not married or common law	0.55	0.47, 0.65	0.76	0.59, 0.98	0.78	0.61, 1.00
Household Size						
Lives with two or more	1.00	…	1.00	…	1.00	…
Lives with one other	0.80	0.66, 0.96	0.68	0.55, 0.84	0.67	0.54, 0.83
Lives alone	0.56	0.46, 0.68	0.63	0.48, 0.84	0.58	0.44, 0.77
Province						
PEI & NFLD	1.00	…	1.00	…	1.00	…
Alberta	3.60	2.35, 5.51	3.21	1.98, 5.21	3.21	1.98, 5.19
British Columbia	2.83	1.86, 4.31	2.36	1.46, 3.80	2.42	1.50, 3.88
Social Provisions Scale by Length of Time In Country						$p < .001$

Notes. CI, confidence interval; OR, odds ratio; NFLD. Newfoundland and Labrador; PEI, Prince Edward Island. An odds ratio of is the baseline. Participants with valid data on all variables were included (91.2%). Missing data were completely at random: Little's MCAR χ^2 (1) = 0.10, p = .75. Model 13: Hosmer and Lemeshow goodness-of-fit test χ^2 (8) = 4.41, p = .82 and Negelkerke R^2 = 12.2%. Model 14: Hosmer and Lemeshow goodness-of-fit test χ^2 (8) = 6.45, p = .55 and Negelkerke R^2 = 11.8

Strong support for the second hypothesis of a protective association of time since in country was observed in both the unadjusted model 2 and fully adjusted model 13. Those in country for less than 10 years were, respectively, observed to be more than 50% (OR = 0.48, 95% CI 0.41, 0.57) or 40% (OR = 0.60, 95% CI 0.49, 0.73) less likely to have a regular healthcare provider than longer standing landed immigrants (permanent residents). Both models strongly supported the protective association of time in country with having a regular healthcare provider in both practical and statistical senses. That is, they both estimated large associations or preventive fractions that were quite precise and statistically significant as well, as indicated by their 95% confidence intervals.

There are a number of interesting augmentative findings in the unadjusted models, but especially in the fully adjusted model, number 13. Among this sample of Canadian immigrants, the following characteristics all predicted healthcare utilization; that is, having a regular healthcare provider, being older, more educated, a woman, married or common law, and living in a relatively large household with a substantial aggregate income where English is spoken. Also of interest, race was not a significant predictor of having a regular healthcare provider among this sample of Canadian immigrants. This may be in part due to the high proportion of racialized people in this sample. However, it is important to note that the public use file condensed a much larger question about racial and ethnic identity down to essentially white yes/no. There is an opportunity to unpack this in future studies; first to re ask the question to see if race is still relevant based on specific identities and in which direction trends may lie.

The significant interaction of social support and length of time in country is depicted in Table 10 below. Here, support was observed for the third hypothesis, the interaction hypothesis. The social support by length of time in country interaction entered model 14 and was observed to be significantly associated with having a regular healthcare provider ($p < .001$). While not part of the central research questions in this study, some covariates did emerge as having the ability to predict healthcare utilization for this sample of immigrants to Canada. These align with existing research in the area of public health.

As hypothesized, the protective influence of social support was observed to be greater among the more vulnerable sample of more recent immigrants (OR = 1.56, 95% CI 1.01, 2.42) than among the more longstanding immigrants (OR = 1.36, 95% CI 0.96, 1.92). In fact, among those immigrants who landed in Canada 10 or more years ago, the social support-healthcare utilization association did not reach this study's statistical significance criterion as its confidence interval included the null value of 1.00. It did, however, approach statistical significance at $p < .10$. What was observed with confidence was a quite strong protective association of social support and having a regular health care provider among relative newcomers to Canada. Among them, the odds or chances of having such a provider were 56% greater if they had a relatively strong social support network than if they did not.

Table 10

Depiction of the Social Support by Time In Country Interaction on Having a Regular Healthcare Provider

	High Social Support-Regular Healthcare Provider Association		
Time In Country	Sample Size	Odds Ratio	95% Confidence Interval
10 or more years	2,344	1.36	0.96, 1.92
Less than 10 years	1,243	1.56	1.01, 2.42

Note. Odds ratios were adjusted for all other predictors.

Table 11

Predictors of Having a Place to go for a Minor Health Problem: Logistic Regression Models

Predictors Categories	Model 1 to 12 OR	95% CI	Model 13 OR	95% CI
Social Provisions Scale				
Low	1.00	…	1.00	…
Medium	1.78	1.30, 2.43	2.01	1.43, 2.83
High	1.83	1.34, 2.50	2.13	1.50, 3.03
Length of Time In Country				
10 or more years	1.00	…	1.00	…
Less than 10 years	0.59	0.47, 0.73	0.74	0.57, 0.97
Age				
18 to 24	1.00	…	1.00	…
25 to 44	1.93	1.37, 2.72	1.78	1.14, 2.74
45 to 64	3.08	2.16, 4.39	2.95	1.81, 4.81
Health Status				
Excellent	1.00	…	1.00	…
Very good	1.37	1.05, 1.78	1.37	1.03, 1.83
Good	1.23	0.94, 1.61	1.20	0.89, 1.64
Fair or poor	2.56	1.53, 4.26	2.93	1.62, 5.31
Sex				
Male	1.00	…	1.00	…
Female	1.63	1.32, 2.02	1.68	1.33, 2.13
Race				
White	1.00	…	1.00	…
Non-white	0.92	0.73, 1.16	1.04	0.78, 1.37
Educational Attainment				
Any postsecondary	1.00	…	1.00	…
High school graduate	1.03	0.73, 1.44	1.21	0.83, 1.78
Less than high school	0.90	0.50, 1.61	1.36	0.63, 2.93
Annual Household Income				
$80,000 or more	1.00	…	1.00	…
$60,000 to $79,999	0.72	0.53, 0.99	0.74	0.53, 1.05
$40,000 to $59,999	1.00	0.71, 1.41	1.07	0.73, 1.57
Less than $40,000	0.56	0.43, 0.72	0.64	0.47, 0.87
Language Spoken at Home				
English or French	1.00	…	1.00	…
Neither English nor French	0.97	0.77, 1.21	1.10	0.84, 1.43

Marital Status				
Married or common law	1.00	…	1.00	…
Not married or common law	0.62	0.50, 0.77	0.88	0.63, 1.23
Household Size				
Lives with two or more	1.00	…	1.00	…
Lives with one other	0.81	0.63, 1.05	0.66	0.50, 0.88
Lives alone	0.62	0.48, 0.81	0.69	0.47, 1.01
Province				
PEI & NFLD	1.00	…	1.00	…
Alberta	3.21	1.90, 5.42	3.51	1.98, 6.23
British Columbia	2.21	1.33, 3.69	2.10	1.20, 3.65

Notes. CI, confidence interval; NFLD, Newfoundland and Labrador; OR, odds ratio; PEI, Prince Edward Island. An odds ratio of 1.00 is the baseline. Model 13: Hosmer and Lemeshow goodness-of-fit test χ^2 (8) = 4.38, p = .82 and Negelkerke R^2 = 9.4

Predictors of Having a Place to Go For a Minor Health Problem

The results of the three regression-based hypothesis tests on the outcome of having a place to go for a minor health problem are displayed in Table 11. The two main association hypotheses were supported, but not the interaction hypothesis. First, quite strong associations were observed between social support and having such a place in both the unadjusted and adjusted models 1 and 13. Whether comparing participants who scored in the mid-range or high on social support to those who scored lower, all four of the statistically significant odds ratios cluster around 2.00, ranging from 1.78 to 2.13. These allowed for estimation of two-fold greater chances of having a place to go for a minor health problem among those with moderately strong to very strong social support networks. Second, similarly strong and consistent support was observed for hypothesis 2. In this instance, newer comers were estimated to be approximately between 25% (OR = 0.74) and 40% (OR = 0.59) less likely to have a place to go for a minor health concern than were, otherwise similar, immigrants who had landed 10 or more years ago. Third, the social support-healthcare access interaction was not significant. Fourth and finally, again, some of the non-hypothesized, but

augmentative relationships were interesting. They were essentially identical to those described in the previous section, but in this instance marital or common law status and language spoken at home were no longer significantly predictive.

Predictors of Having an Unmet Healthcare Need

The initial results of the three regression-based hypothesis tests on the outcome of having an unmet healthcare need are displayed in Table 12. Only the main hypothesis of a social support-unmet healthcare need association was supported. In this instance, the unadjusted (models 1-11) and adjusted (model 12) models reported preventive fractions of between 25% and 50% (statistically significant ORs of 0.75 and 0.50), suggesting that strong social support may prevent such unmet healthcare needs by between 25 and 50 percent. With a rarer outcome and accounting for less variability (i.e., smaller R^2), it should be noted that these models had less statistical power. As a first step in bolstering power, province was removed from these models.

As an exploration, simpler, more powerful models were built on the outcome of unmet healthcare needs (Table 13). First, it was noted that all of the predictors were insignificant in both the unadjusted and adjusted models except social support and health status (Table 12). So, simpler models were built retaining only the hypothesized predictors, health status, and language, that despite its insignificance seemed of practical importance in understanding such an outcome. Now, the length of time in country hypothesis was supported, with newcomers experiencing much greater such unmet needs (OR = 1.66 [model 5]). The effect of removing health status was explored as it might represent overcontrol in modeling unmet health needs. A significant trend support was shown for hypothesis one. The trend support for hypothesis 2, however, was not observed.

Table 12

Predictors of Having Unmet Healthcare Needs: Logistic Regression Models

Predictors	Model 1 to 11		Model 12	
Categories	OR	95% CI	OR	95%
Social Provisions Scale				
Low	1.00	…	1.00	…
Medium	0.43	0.23, 0.81	0.65	0.32, 1.32
High	0.50	0.27, 0.93	0.75	0.36, 1.53
Length of Time In Country				
10 or more years	1.00	…	1.00	…
Less than 10 years	1.14	0.72, 1.81	1.38	0.80, 2.38
Age				
18 to 24	1.00	…	1.00	…
25 to 44	0.98	0.41, 2.33	0.84	0.30, 2.36
45 to 64	0.74	0.30, 1.78	0.45	0.14, 1.40
Health Status				
Excellent	1.00	…	1.00	…
Very good	1.07	0.54, 2.11	1.22	0.60, 2.47
Good	1.35	0.69, 2.65	1.38	0.65, 2.92
Fair or poor	4.35	2.19, 8.64	5.85	2.64, 13.00
Sex				
Male	1.00	…	1.00	…
Female	0.93	0.59, 1.46	1.16	0.71, 1.90
Race				
White	1.00	…	1.00	…
Non-white	0.98	0.60, 1.59	0.97	0.54, 1.71
Educational Attainment				
Any postsecondary	1.00	…	1.00	…
High school graduate	0.90	0.43, 1.90	0.83	0.37, 1.90
Less than high school	0.80	0.19, 3.31	0.46	0.06, 3.43
Annual Household Income				
$80,000 or more	1.00	…	1.00	…
$60,000 to $79,999	0.98	0.49, 1.98	0.88	0.40, 1.95
$40,000 to $59,999	1.04	0.53, 2.05	1.02	0.49, 2.13
Less than $40,000	1.19	0.68, 2.10	1.12	0.58, 2.19
Language Spoken at Home				
English or French	1.00	…	1.00	…
Neither English nor French	0.62	0.37, 1.03	0.52	0.29, 0.95

Marital Status				
Married or common law	1.00	…	1.00	…
Not married or common law	1.12	0.70, 1.79	0.97	0.64, 2.01
Household Size				
Lives with two or more	1.00	…	1.00	…
Lives with one other	0.80	0.46, 1.39	0.75	0.40, 1.41
Lives alone	1.01	0.57, 1.78	0.94	0.40, 2.17

Notes. CI, confidence interval; OR, odds ratio; NFLD. Newfoundland and Labrador; PEI, Prince Edward Island. An odds ratio of 1.00 is the baseline. Model 12: Hosmer and Lemeshow goodness-of-fit test χ^2 (8) = 5.64, p = .69 and Negelkerke R^2 = 6.2%.

Table 13

Predictors of Having Unmet Healthcare Need (significant)

Predictors	Model 1 to 4		Model 5		Model 6	
Categories	OR	95% CI	OR	95%OR	95% CI	
Social Provisions Scale						
Low	1.00	…	1.00	…	1.00	
Medium	0.43	0.23, 0.81	0.54	0.28, 1.05	0.41	0.22, 0.7
High	0.50	0.27, 0.93	0.66	0.34, 1.27	0.46	0.25, 0.84
Length of Time In Country						
10 or more years	1.00	…	1.00	…	1.00	…
Less than 10 years	1.14	0.72, 1.81	1.66	1.01, 2.72	1.44	0.89, 2.34
Health Status						
Excellent	1.00	…	1.00	…		
Very good	1.07	0.54, 2.11	1.10	0.55, 2.19		
Good	1.35	0.69, 2.65	1.31	0.64, 2.67		
Fair or poor	4.35	2.19, 8.64	4.20	1.97, 9.00		
Language Spoken at Home						
English or French	1.00	…	1.00	…	1.00	…
Neither English nor French	0.62	0.37, 1.03	0.55	0.32, 0.95	0.56	0.32, 0.96

Notes. CI, confidence interval; OR, odds ratio; NFLD. Newfoundland and Labrador; PEI, Prince Edward Island. An odds ratio of 1.00 is the baseline. Model 5: Hosmer and Lemeshow goodness-of-fit test χ^2 (8) = 5.64, p = .69 and Negelkerke R^2 = 6.2%. Model 6: Hosmer and Lemeshow goodness-of-fit test χ^2 (6) = 8.10, p = .23 and Negelkerke R^2 = 1.9%.

CHAPTER 6: DISCUSSION

This study examined the protective relationship among social support, time in country, and healthcare utilization for those born outside of Canada, using the Canadian Community Health Survey 2017/2018 annual edition. The chapter includes a review of study rationale, along with a discussion of the study's strengths and limitations. This thesis concludes with implications for social work practice, policy, and education based on several significant findings. Findings from this study will make important contributions to understanding how to promote healthcare utilization for immigrants, through harnessing social support, especially for the most vulnerable and newest arrived Canadian residents.

Throughout Canada, healthcare is becoming increasingly expensive for our publicly funded systems (Gruber, 2022; Lane & Vatanparast, 2022). The Canadian population is growing and ageing, which places more strain on the system. As such, it is ever more important to explore creative and community-based responses to increasing the health of the residents of Canada, especially those that can be low- or no- cost. Social support, especially informal social support is an important means through which immigrants build networks and capital once they have arrived in Canada. As healthcare costs increase and possible barriers for immigrants to accessing healthcare persist, social support is a potential resource that social workers and other service providers should be aware of and attempt to capitalize upon. The connection between healthcare utilization and strong health outcomes is an intuitive one that is also explained through 'successful' studies of medical interventions. Martin et al (2018) add that Canada's publicly funded system is a source of immense pride for Canadians. Access to healthcare, and therefore

utilization may be easier than in countries with a fee for service, but utilization is far from equal across demographics, based on complex personal and societal contexts. In short, strong healthy people make up strong healthy communities which, in turn, creates a stronger Canada.

The Canadian Community Health Survey offers a glimpse into many health-related behaviours of Canadian residents. In focusing on social support, through responses to the social provisions survey (Cutrona & Russel, 1987), this dissertation focused on residents of British Columbia, Alberta, Prince Edward Island, and Newfoundland and Labrador. Social support itself has been positively linked to health outcomes (Cobb, 1976; Di Matteo,2004), and so it is logical to explore whether or not social support is protective specifically for immigrants as it relates to healthcare utilization. Further, due to the complexities of the acculturation and migration process, additional focus was added to the protective relationship of time in country, social support and healthcare utilization. As immigration continues to rise around the world including in Canada, a focus on this population in particular becomes increasingly important (Aery & Mckenzie, 2019). Personal sociodemographic contexts, including age, martial status, education, household size, race, language, and income, cannot be disconnected from any decision made, healthcare or otherwise, and so have been included in this study as covariates. These central tenets of the social determinants of health are not only key to understanding healthcare related behaviours (and therefore utilization) and the protective factor of social support but are also central in harnessing the power of social work to support better health outcomes for immigrants.

For those born in Canada, the context in which healthcare is provided and accessed is generally clear. This may be less true for those with diverse worldviews and lived experiences. Illness, health and its definitions vary by culture, as do individuals willingness to discuss it. Mainstream health services must be mindful of this and make changes to their approaches in order

to accommodate diversity. This may include simple changes, like reducing medical jargon, but also more systemic changes including different approaches to the entire process, from intake to discharge (Fang & Katakia 2017). In taking time and effort to gather a more fulsome sense of the client or patient, health service providers may glean important information. As noted above, many immigrants are under employed, and living in situations that are different than pre arrival, only asking basic questions, especially for this vulnerable population, important information will be missed.

Understanding how those born outside Canada may choose (or choose not) to utilize healthcare is therefore important to strengthening the entire system. The covariates used in this study highlight some of the sociodemographic factors that have interacted with the relationships between social support and healthcare utilization. This study has supported the hypothesis focused on one main covariate, regarding length of time in country, in which social support has greater protective power for those who have arrived more recently than ten years before the study was administered. Many of the sociodemographic factors used in this study, including education, age, marital status, income, household size and self-rated health and even province can change over time, during the settlement or acculturative process.

By definition, immigrants are a diverse group, not only based on country and culture of origin, but in regard to lived experience and social contexts. Often, all service users are lumped together when examining utilization of Canadian healthcare based on costs to the system. In an effort to narrow this focus, this study offers a novel level of analysis but comparing healthcare utilization behaviours of immigrants within groups based on length of time since arrival in Canada. Through the incorporation of demographic variables, informed by academic literature, it is possible to see a more intersectional view of the protective nature of social support as it relates

to healthcare utilization. This insight into healthcare utilization for those not born in Canada, who may be some of Canada's most vulnerable residents, can contribute to addressing both barriers in and limitations to current service offerings.

Strengths

This study utilized a large, national survey to understand the protective role of social support in increasing healthcare utilization for immigrants to Canada, who make up a significant portion of all Canadian residents. Specifically, this study has illustrated that there is a protective relationship between social support and healthcare utilization, especially for those newer to Canada and therefore the most vulnerable. This was largely seen regarding the healthcare utilization outcome variable of having a regular healthcare provider, indicating that having a strong social support network helps immigrants identify with healthcare support. While the literature reviewed discussed shifts in social networks during migration and risks of loneliness, the protective factor of social support shows that immigrants do in fact have social supports that they access as needed. This is good news.

There is an existing research gap exploring the potential of social support for immigrants, especially as it relates to healthcare utilization, which is a bedrock of wellbeing. This particular study contributes to filling this gap, through quantitative multiprovincial data. The significance in the relationship between both social support and time in country for immigrants to Canada shows that there is potential for communities to support each other, and to connect with broader supports, like healthcare. This is where social capital theory is especially important, as these social networks seem to be harnessing resources, like healthcare supports. Further, social cognitive theory, as explained above, helps to highlight the process of the perception of the value in a given

connection. The value that these connections have equate to social capital for the individual immigrant. When linked to each other, these networks are especially powerful.

Interestingly, many of the covariates in this study also proved significant, though not the main focus of the research questions. This study affirms findings from prior research. The findings presented above align with what is usually seen in public health research; higher education and higher income is connected to higher healthcare utilization, as is higher age and having others at home, whether by marriage or otherwise. This last point speaks to the power of social connection especially well. Those who have been in Canada longer appear to have higher healthcare needs, which is consistent with the healthy immigrant effect in the literature and shows that even when in Canada for over ten years (potentially even the majority of someone's life), factors that affect immigrants, and create vulnerability and risk still exist. This also shows that there is a need to continue to create strong social networks, even after many years in country. The years since arrival are helpful in the creation of networks, but this study shows that even after a decade, challenges persist.

In general, though immigrants are a vulnerable population, it is interesting to note how well educated the sample is, which speaks to potential internal resiliencies that can help build social capital. The sample for this study was predominately racialized/non-White (69.3%), which is to be expected given the binary nature of this question. The literature on race and healthcare utilization argues that those who are not White are less likely to utilize healthcare, yet here, in this study, the majority do utilize healthcare, even though they are over two thirds likely to identify as non-White. This non-White population, according to literature above, would be likely to report unmet healthcare needs, due to barriers such as racism, lack of representation and stigma, however, the vast majority of the sample reported no unmet needs, indicating general good health,

or that the need has been met. 64.3% spoke an official language at a conversational level, meaning that they can communicate with most healthcare professionals in Canada, even though the literature cited above notes that language presents a barrier to access regarding healthcare. This high percentage of comfort in official language bodes well for the potential to create social networks with others outside of communities of origin. While immigrants in general share vulnerabilities regarding social determinants of health, those who responded to this survey, also show means to access social support, and therefore potentially increase healthcare utilization even further. This immigrant sample was well education, able to communicate in official languages and, in general, utilizing healthcare based on answers to the three healthcare utilization variables. They also, in general, reported high levels of social support. These two points suggest that the protective factor at social support could be a large factor at play helping immigrants to connect to healthcare and therefore raising utilization levels. It would be interesting for future research to explore this dichotomy with other social determinants of health, like employment or housing. Namely, is social support a protective factor for immigrants to Canada regarding other markers of wellbeing?

In noting strong language skills, high educational levels, general good health, and high levels of healthcare utilization, it is possible to posit that this sample of immigrants are not in fact vulnerable on many levels. Rather, this thesis shows that the protective factor of social support is increasing healthcare access at a higher rate for those who arrived sooner, implying that vulnerability may be mitigated some by social support. Simply put, immigrants, especially new(er) comers, may need to rely on social support more than others in order to have the same levels of healthcare utilization and or other social determinants of health than other Canadian residents. This study has demonstrated hypothesis support regarding the protective factor of social

support for all immigrants, especially though who have less time in the country, regarding healthcare utilization; especially in having a regular healthcare provider. These connections between length of time in Canada, social support, and healthcare utilization are explored through the lens of social work in the implications section of this thesis.

Limitations

Large Government Surveys

As with many large quantitative studies, the strength of this study- in allowing for a high number of respondents-is also its limitation, as the methodology does not allow for an in-depth understanding of individual contextual reasoning for behavior. While quantitative studies are often widely publicized and catch the eyes and ears of policy makers, they can only interpret aggregate or high-level data (Jerrim, & De Vries,2015). Interpretations are made based on the responses of groups, rather than at the individual level. A fuller picture of the complex nature of human experience can be garnered through the use of complimentary methodologies, such as smaller, more detailed quantitative surveys and qualitative interviews (Foss & Ellefsen, 2002). This survey, by definition, is non-longitudinal, and so only represents one point in time. Future research opportunities point to studies that compare and contract CCHS versions over time.

Disclosure in any context can be complicated, even more so to a stranger over the phone. While Statistics Canada makes every effort to anonymize public data and make the experience accessible (Boswell, 2019; Zajacova, Siddiqi, 2022), respondents may have their own motivations for answering questions with varying levels of truth. This is doubly true when asking people born abroad (especially) to speak to the government. Participation in the Canadian Community Health Survey is voluntary (Belland, 2002), which may lead to overrepresentation of some groups rather

than others (Neild & Nordstrom, 2016). Further, the limitations to participants as well as the willingness of participants may further limit the scope of this work. This can be mitigated with future research that could triangulate data with different methodologies.

Public Use Database

The main limitation of this study lies in the restrictions of the publicly available, national survey database during the COVID-19 pandemic, due to research data center closure. Ethics and security clearance had previously been given in order to access restricted data for this study and therefore, more detailed analyses using the restricted database will be possible in the future. Specifically, the public use database utilized in this study did not offer access to sociodemographic variables that would help to illuminate specifics about the identities of respondents to the Canadian Community Health Survey. Two points are relevant here. First, the nuances of cultural influences may not be clearly stated in quantitative research (Gergen, Gulerce, Lock, Misra, 1996; Quantana, Troyano, Taylor, 2001), and even less so when these nuances are condensed into large-often dichotomous categories. The public access database indicates whether someone is an immigrant, but not from where or through which pathways someone immigrates to Canada. The world is made up of thousands of cultures, each with diversities among them. For example, the experiences of a White immigrant from Britain with strong English skills may differ markedly from a Black immigrant from Somalia, who speaks English as an additional, but not first, or even second or third language. This study, however, is an important start to understand the nuances of immigration and acculturation. Interestingly, where this study lacks in specificity, in makes up for in telling the story that, in general, immigrants' choices are still similar, regardless of the differences noted above.

Covariate Limitations

One of the limitations of this study relates to the framing and interpretation of covariates. Regarding length of time in country, the CCHS asked about time since achieving landed immigrant (commonly known as permanent resident) status. This unclear wording can lead to misunderstandings in survey implementation. First, upon hearing 'landed' there is an implication that the question refers to arrival when it is actually asking a more specific question. Some immigrants may arrive to landed (permanent resident) status, others will arrive on various visas and the apply for this status. However, this implication does not change the results of this study. This nuance does not affect the interpretation of the results regarding length of time in Canada, as the answer is still stratified by time (10 years or more in Canada, or less than 10 years).

The definitions of social support through the Social Provisions Scale (Cutrona & Russel, 1987) may not be inclusive of definitions of social support across cultures. As a construct, social support may be culturally defined (Bandura, 2002; Yan & Anucha, 2017). This is both a limitation and an opportunity for future research as it presents opportunities to better understand definitions of social support. Questions are subjective and imply agreement that a 'yes' would be helpful to the interviewers. The original, larger Social Provisions Scale (Cutrona & Russel, 1987) has been condensed to ten questions, and while these have been statistically validated, there is not further evidence to support whether or not the omitted questions may have held more value for different communities, roles, cultures etc. For example, Johnson (1987) cites interpretation of parenting as different based on vantage point- what a parent may see as supportive and positive, a child may see as overbearing. For some, checking on a neighbour is welcomed, for others overbearing and intrusive. This varies widely across cultures, and, while the social support scale asks if the

respondent has access to a type of person, it does not ask if the person wants or needs that sort of person in their life, which may reflect different answers to the question. The questions also vary regarding the number of people in question. Some questions ask about having people who can support in various ways, and others about whether there is a single trustworthy person. The Social Provisions Scale (Cutrona & Russel, 1987) does not allow for nuance; there is no 'in between/unsure/maybe' etc. answer, rather only a Likert scale of one to four. It is possible that respondents offered more information anecdotally here, though this would not be captured in quantitative data entry. Here, those who may be connected to doctors, have experience seeing doctors, or even being doctors might be influential in determining utilization. When unsure of where to go, many revert to people they know, including those in social networks. This is how social capital may result in referrals, when unsure otherwise of where or whom to seek healthcare from.

Lastly, the scale does not ask about connection to the person identified. Having someone to talk to who is online versus nearby may change the experience significantly (High & Buehler,2019), especially in the case of healthcare utilization. Similarly, knowing whether that person is a relative, a child, a parent, a friend, or even a professional would add interesting nuance to the information given. The theoretical framework above posits that the capital inside social networks contributes to community connection, but if the person offering the support is outside the local or informal sphere, they may not hold the correct social or network capital to support healthcare utilization at the local level. Again, future research could help triangulate results.

Language

The recoded dichotomous language variable asks about whether people speak an official language or not, but this may not necessarily be protective or an indication of vulnerability, depending on where an individual lives. While federally funded services are legally required to be

offered in either official language, in practice this is often not the case. As such, while speaking French (for example) would be seen as a source of privilege due to it being an official language, if in a region or province without a lot of French healthcare provision, this may act as a barrier rather than a support. Further, especially when unwell, the desire to speak one's native tongue, and to be understood clearly is essential. Many may speak the official language, even well, but it may still not be the first choice for service. Further, there may be an assumption that speaking an official language and immigrant status are mutually exclusive. Many countries around the world speak both or either of these languages as a result of globalization and/or colonization. In this way, this variable may be less relevant than originally posited. Lastly, in small ethnic enclaves, speaking the dominant language may be a strength, even if it is not an official one.

Healthcare Utilization Variables

The three variables that are used to define healthcare utilization are: do you have a regular healthcare provider; do you have a place to go for a minor healthcare concern; and do you have unmet healthcare needs? As noted above, these three variables are chosen based on the assumption that identification of these situations equals potential utilization. It does not, however, guarantee utilization. The first health care utilization question of having a regular healthcare provider may not mean doctor, but in the public use access file, this is the most specific question that accesses the information required for this study. A regular healthcare provider could indicate a naturopath, homeopath, acupuncturist, or any number of allied care professionals, as the answer is self-reported. Further, the coding of the place to go for care of a minor health problem variable does not guarantee correlation for those who answered that they go somewhere other than a doctor's office for medical care. It is possible that someone has a family doctor who works out of a walk-

in clinic, community health center, or other location and that is why it is chosen as the answer to where to go with a medical need.

Someone may answer that they do have somewhere to go for a minor need, even if that place is the emergency room. This response would imply that they are not utilizing primary healthcare as traditionally intended, yet in this study would be included as those who are assumed to be utilizing healthcare (other than the hospital). Most did not report an unmet need, and therefore this variable presented power issues in analysis.

Implications

This section offers broad and specific implications and recommendations regarding the findings of this study. More specifically, this study found that social support is an important protective factor regarding healthcare utilization for an important, diverse, potentially vulnerable population; immigrants to Canada. Implications focus on social work education, policy, and research.

This thesis explored the experiences of nearly 4,000 residents of Canada, between the ages of 18 and 64, all of whom were born outside of Canada. They were roughly evenly split by reported sex, largely racialized, with over a third not speaking either English or French. The majority of the sample came from Alberta and British Columbia (generally wealthier provinces), with a minority from the Atlantic Provinces of PEI and NFLD. Over a third of the sample was neither married nor common law. This is interesting when noting the majority of their ages (25-46) and the split of household size, with only 20% living alone. This implies that there are many immigrants who are living with people other than their spouses and may suggest intergenerational households. As such, when working with one immigrant, information can travel to many more people within the household.

With regards to educational attainment, the vast majority had at least some post-secondary education. This is in line with possible requirements for admission into Canada, with greater opportunities given to those with formal education (Government of Canada, 2014;Vineberg 2015). It may also suggest educational attainment after arriving in Canada, as the sample was stratified at 10 years.

Similarly, household incomes were stratified, with the highest percentage over $80,000. However, due to the presence of many larger households, this does not equal 'wealth' per se. It does, however, indicate that respondents' incomes were more likely to be under $40,000, or over $80,000 than in the middle. Regarding self-reported health, ratings were relatively equal across responses, with the exception of 'fair to poor,' which was the lowest of response ratings. At least 90% of the sample reported good or better health status. This is interesting as many did not have a healthcare provider or a place to go for even a minor problem, which will be further discussed below. Regarding length of time in country, generally speaking, those who arrived sooner (under 10 years) were younger, less educated, less wealthy, more likely to be racialized and to speak a non-official language at home. They also reported higher health outcomes, which may align with both their ages and the screening factors before arrival in Canada, as previously discussed.

In turning to the variables of central interest in this study, the majority of respondents self-reported 'high' levels of social support, though only 45% achieved the highest score (35-40). In order to score 35-40, a responded would have had to answer agree to strongly agree the majority of the questions on the social provisions scale (Cutrona & Russel, 1987), and must choose strongly agree at least twice. At minimum, in order to score in this bracket, it would not be possible to strongly disagree or disagree with more than one two assertions on the scale. This scale

asks the participant whether they agree or disagree (or strongly) with statements about having people who can offer support.

Three variables denoted healthcare utilization; having a regular healthcare provider, a place to go for a minor problem, and/or an unmet health need. Healthcare utilization, in this thesis, was measured with each of these variables independently (rather than compiling them together). The majority of the sample did have access to a regular healthcare provider and a place to go for a minor healthcare problem. The overwhelming majority reported no unmet healthcare need. It is important to note that this does not mean no need existed, but rather that it was not unmet. This paints a picture of a population that is generally utilizing healthcare, but due to the large nature of this sample, even those smaller representations of not having places to go or a provider have implications for social work practice, policy and education.

When viewing healthcare utilization through the lens of having a regular healthcare provider, social support was a protective factor. Specifically, more social support correlated to a higher likelihood of having a regular healthcare provider. This was true when tested alone and remained true when adding other sociodemographic variables to the model. Regarding the second hypothesis exploring a protective factor of more time in the country, the hypothesis was supported that less time in the country related to less social support. When adjusting for all other sociodemographic variables, this remained true. In exploring the interaction between the two variables of social support and length of time in country relative to having a healthcare provider, this too was significantly related to healthcare utilization. This means that social support was more beneficial regarding raising levels of healthcare utilization for those in Canada for less time. Knowing that Canada continues to accept immigrants at rising rates (Government of Canada, 2023b), this represents a large number of potential clients that social workers will interact with.

When viewing healthcare utilization through the lens of having a place to go for a minor problem, those who had more social support were more likely to have a place to go for minor problems, and those in country for less time were less likely to have somewhere to go for a minor problem. However, the relationship of social support scores across length of time in county was not significant. This indicates that it did not matter how long someone is in the country based on social support scores and having a place to go for a minor problem. Once citizenship is conferred, access to many immigrant focused services is no longer available, and eligibility and access to settlement services is only for those with who qualify as refugees, have a visa (work or otherwise) or permanent resident status (Government of Canada, 2023c), however this study has shown that needs still exist for immigrants even after the citizenship ceremony. Social workers must be mindful of not assuming that citizenship equates to full comfort in navigating Canadian systems, especially as it relates to healthcare utilization.

Lastly, when viewing healthcare from the lens of having unmet health needs, unsurprisingly, little was found. This may be due in part to the skew of the data in favour of not having an unmet health need. Only one finding is of interest here; higher social support was related to not having unmet needs. This highlights the protective factor of social support in the lives of immigrants. When simplifying this model and removing insignificant variables due to power, a relationship was observed in which those who had less time in country (arrived less than 10 years ago) were more likely to report an unmet healthcare need. In short, social support has been shown to be a protective factor, when taking into account all other sociodemographic variables as it relates to healthcare utilization for immigrants. This study had three main research questions, of which the null hypothesis has been rejected for each. The first research question explored the protective nature of social support for immigrants to Canada, which was strongest

regarding the healthcare utilization variable of having a regular provider. The second research question related to the protective relationship of length of time in Canada and healthcare utilization and followed the same pattern of having most significant results regarding having a regular healthcare provider. Lastly, the interaction question, and subsequent hypothesis was supported, that social support is a power powerful predictor (and therefore more protective) for those in Canada for less time, regarding healthcare utilization. The healthcare utilization question of having a place to go for unmet needs reflected similar patterns and as discussed above most immigrants in this study sample did not report unmet needs, reflecting the third healthcare utilization variable used.

Implications for Practice and Policy

As a profession, social work interacts on macro (community and policy) levels as well as micro (interpersonal or direct practice) levels. As immigrants are present throughout both contexts, implications for social work practice and policy are interwoven here. Two main hypotheses in this study were supported, along with an interactive effect; social support is protective in nature regarding healthcare utilization for immigrants to Canada, less time in country relates to less healthcare utilization, and social support is protective regarding healthcare utilization, especially for those who have arrived in Canada sooner, and this has implications for social work practice and policy. Increasing levels of healthcare utilization can mean an increase in healthcare outcomes for individuals, which can in turn create healthier communities. However, first there must be an understanding of how immigrants engage with healthcare system. Many people do seek out others' opinions on whether they need healthcare services and/or which services to utilize. The opinions sought can often come from within their self-identified circle of those who provide social support (family, spouse, friends etc.). A higher indication of social

support may mean that those supports do in fact exist, but it may not have a direct effect on healthcare utilization in a way that is measurable with large quantitative study. Thirdly, the theoretical framework above, along with the academic literature noted, conflicts in its assessment of the roles of social support. For some, the relationship between social support and stress modifies the need for healthcare. In other studies, researchers identify that social support itself may be the healthcare (Uchino, 2009). Most of this sample had reported a high level of social support (score 30 or over, Orpana, Lang & Yurkowski, 2019). This may also drive people towards medical care, through connections within social networks. Just because many reported high levels of social support does not meant that there is still not work to do within social work practice to ensure that this remains and/or is augmented further.

This study is focused on the power of social support as a protective factor, and one that is largely positive for those who have it. It is important to note however, that not all immigrants- regardless of length of time since arrival- are guaranteed to have social support. The immigration and subsequent acculturation process can be complex, and possibly isolating (Yan & Anucha, 2017). With this in mind, one of the main foci of social support should be to help connect immigrants to social support, whether formal or informal.

Some of the most vulnerable residents in Canada were not born here and so, understanding how to decrease vulnerability is essential in creating healthy, vibrant communities. The Public Health Agency of Canada supports this through the Healthy Canadian and Communities Fund. This fund aims to prevent chronic disease and identifies immigrants as a priority population. This is a good start; however, these grants must be more widely advertised, allowing for a more diverse applicant pool to be successful in supporting immigrant health. This fund can also be generative regarding social support through programming aimed at increasing connections to health-related

services. Further, the requirements for these grants can often place smaller, grassroots (and often peer spearheaded) initiatives at a disadvantage as they require organizations to supply significant materials and resources to even apply. This is especially important as this grant asks for a focus on 'new ways to address risk' through 'multisectoral engagement'. (Public Health Agency of Canada, 2023). Similarly, Anucha et al (2006) stressed the importance of wide marketing of settlement services, as well as inclusion of immigrant voices at all levels of service programming. This study found that organizations can play a central role in helping immigrants connect to networks and therefore raise social capital, but that this can only happen with adequate funding. This remains true. Organizations, and their programming are typically made up of groups, and allow people to connect to others. These connections can augment social support in many ways.

As Canada continues to welcome immigrants from around the world, increased mindfulness and care is needed to inform social work practice. One of the ways to decrease vulnerability is to increase health, through the utilization of healthcare. This is at the core of social work practice as so many social workers are involved in healthcare systems. Knowing, and prioritizing this can help inform social work practice in relation to intake, and in getting to know clientele. O'Donnell et al (2016) add that while healthcare is often patient/client informed (which is a good thing), immigrants may not be invited to these consultative conversations. As such, the system may not be designed to be as accessible as possible for them. Social workers, who often work as system navigators and advocates, can help here. The government of Ontario is working to bridge this gap as well. One example in action can be seen in how the provincial government has been working to develop health equity frameworks that social work practice, in some ways already works under. In it's initiative to move towards inclusion and anti-racism, the provincial government is working to understand how structural and systemic racism exist within healthcare and how policies of

inclusion and connection, coupled with opportunities for advocacy and listening to voices of lived experienced can strengthen health outcomes. A core focus of this effort is to understand how various intersectional points of identity can present within healthcare and how they interact to effect health outcomes. This understanding can be sought through the inclusion of stakeholders and investments in communities. These principles, of listening, reflecting and subsequently acting are a large part of the social work approach, and so social work has a role to play in helping to support initiatives like this one. Principles of equity and inclusion connect to social support as it is only when people feel included that social support can be transmitted. With this in mind, social support and this framework go hand in hand. The report highlights the roles that a diverse healthcare worker force plays in supporting diverse Canadians, adding that attention must be paid to positive (inclusive) and negative (racist) experiences in order to best support healthy Ontarians (Corpus Sanchez International, 2020). Listening to the voices of those affected, both working in and interacting with the healthcare system is not only a form of social support that can flow from both system to individual and vise versa, but another central value of social work.

System navigators and advocates must share their experiences back with the larger medical system, rather than seeing the work as direct practice alone. It is not always appropriate to have patients at decision making tables for various reasons, but room must be made for those who have direct access. Not only do system navigators have direct access to vulnerable patients and clients, they also have experience in working with multiple systems and services. Social work is focused on helping people to amplify their voices and their ability to advocate for themselves. Navigators can help bring these voices forward. There is practice wisdom gained during the process of system navigation and these workers are uniquely poised to articulate gaps and possible remedies. Along with encouraging clients to advocate for their own needs, and advocating on an individual basis,

system navigators should be present at decision making tables, committees, and medical boards whenever possible.

Many sections of this chapter discuss the importance of including immigrants at every step of programming in order to increase cohesion, buy in and ultimately social support. In increasing inclusion from the lens of those providing service, the power of social support can be harnessed from those who work within and understand health care services for themselves. However, in both settlement and healthcare, immigrants are very much already present. Immigrants account for nearly 25% of healthcare sector workers, according to the government of Canada (Government of Canada, 2022c). When considering those who are no longer immigrants but now citizens, as this study does, this number is actually much higher. With this in mind, the recommendation here is not only to continue this inclusion but to ensure that mechanisms for feedback and listening to the workforce are present at every level.

Furthermore, intakes in various agencies should explore not only immigrant status, but length of time since immigration. Intake and other foci of social work interventions could explore social support networks. Along with connecting people to resources- a skill that is at the core of social work- focus must be on connecting people to each other, and to new, different people. This can be incorporated into program planning by ensuring that engagement is as diverse and dynamic as possible. As noted above, and discussed based on social capital theory, diversity in social connections is key to social mobility (Anucha et al, 2006). Further, in terms of understanding the relationships of various forms of social support in general, the potential exists for program development and policy focused around harnessing the power of social support networks to create change. This could be done through networking programs that allow immigrants to interact across cultural, and socioeconomic lines- not just in search of opportunities, but to connect as humans

and people with lives, families, and possible shared interests. Rather than philanthropic, or charitable programs alone, i.e. those geared at helping immigrants access opportunities and resources, programs and systems should also explore collaborative, creative ways to foster relationships that are more balanced in nature. In this way, the creation of policies and practices that encourage a fostering of deeper relationships may actually help inform both the need for greater social capital and therefore, in turn, connections to more resources and opportunities. Regarding the healthcare sector, one example of policy and practice that is showing success regarding an interdisciplinary support to healthcare provision (social and medical in model) can be seen in community health centers. The model of the Community Health Center shows how the power of social support harnessed through the healthcare system shows promise (McMaster Health Forum, 2020). The CHC system is designed to literally meet people where they are, and are regularly located in neighbourhoods where mainstream healthcare is harder to access, and health outcomes may be lower than other places. This contributes to reducing isolation by offering accessible supports, and increasing engagement through dynamic and creative programming (Collins, Resendes & Dunn, 2014). The community health center model has a track record of proven success, measured through patient satisfaction and health outcomes, all while staff report generally positive work environments (McMaster Health Forum, 2020). This model is especially promising at it exists to both support community development and health outcomes, recognizing that they are inextricably linked. This dissertation's finding that social support can directly influence healthcare utilization supports this point, agreeing that CHS programming can be especially powerful in increasing health outcomes, especially for those who may be otherwise excluded. (McMaster Health Forum, 2020; Ontario Community Health Centers, 2008). Social workers are uniquely poised to support this programming at the intersection of social support and

health as the profession lends itself well to interdisciplinary environments (Tadic et al, 2020). Increased focus on this model in the classroom and supporting students towards working within the CHC framework can effect health outcomes in positive ways.

Regarding immigrant specific supports, in preparation to explore this section of the dissertation, a scan of international programs for immigrants revealed a wide array of programs geared to support refugees, similar to Canada's government assisted refugee (GAR) program explained which offers guided support especially in the first year in Canada. There was much less to be found at the public, national level supporting those who migrate through means other than refugeehood. This thesis has discussed the importance of social support due to vulnerabilities at personal level, and healthcare choices made individually. However, it is important to note that harnessing social support for greater healthcare utilization is not just about helping immigrants propel forwards from a neutral starting point. Rather, in many places in the world (some would argue in Canada as well), anti-immigrant sentiment is alive and well. In a global context, where many immigrants are arriving from a journey of more than one place, and hearing about how their home countries have or have not accepted immigration, there can be cognitive dissonance in the process of settlement. Along with all of the challenges present during acculturation, immigrants are forming their senses of self-based on their perceptions who they are now as an 'immigrant in Canada'. Until arrival, exposure to impressions of immigrants could only have been formed in home and transit countries, where views may not be kind. In an increasingly large number of countries globally, immigration may be welcomed on paper but not in principle, leading to an even wider gap in standards of living in a variety of ways. This became clear after a policy and program scan of immigration supports worldwide, the vast majority of supports are heavily weighted towards refugee support only.

While refugees do have distinctive needs due to the context of refugee hood, this does not negate that those who arrive through other pathways of immigration are also vulnerable. In this way, programs that are designed to support refugees could also be widely beneficial for immigrants, in this case, permanent residents. Immigrants arrive in Canada with goals, plans and expectations, based in part on the experiences of watching and hearing stories from others. This internalization of 'success' is central to social cognitive theory, an underpinning portion of the theoretical framework for this study. Here, social cognitive theory is also relevant to program coordination and service provision as programs geared towards increasing social networks and social capital can only work if the immigrants themselves see their value. This takes place in the modelling, and experiences of those that the immigrants may be connecting to through such programs. Discussions of their initiatives, along with two examples from Scandinavia, as well as large government and regional initiatives here are presented below.

In Switzerland, a program called "Active Asylum' is proving to be successful in building bridges through gaming and is interestingly open not only to asylum seekers but those seeking any community. Specifically, this program teaches card (and other) games to immigrants so that they can later be shared in larger groups. The Swiss approach has been largely led by grassroots movements, rather than top down from the government (as seen in Canada), and this has resulted in creativity and engagement for all involved as programs can be more nimble in delivery without being incumbered by bureaucracy (Swiss Info, 2016).

In Iceland, programs pairing immigrants with volunteers is proving to be a successful step towards integration. While many countries, including Canada offer supports to immigrants upon arrival, this program is unique in that it purposely harnesses volunteers, who are likely engaged in other pursuits and have full lives, and jobs. This can increase both the network capital of

immigrants, but also introduce the power of volunteering, and the access of immigrants to resources that these volunteers have. Further, as staff are volunteers, some of the traditional boundaries around client/staff worker may not apply, allowing for closer relationships to be formed. Interestingly, this program requires volunteers to have a strong knowledge of English (the national language is Icelandic) so as to also help with communication barriers. The 'Guiding Friend' program offers a similar program through Red Cross (interestingly, an organization often focused on healthcare), (AUS, 2023; Raudi Krossinn, 2023). These 'buddy system' models could be useful within healthcare utilization as a support to navigate the system in general, but especially during stressful times. Through engagement with other immigrants, patients can share strategies to expand their support system and therefore increase resilience. This offers an opportunity to expand networks and raise social capital. When immigrants are able to interact with others who are more familiar with the mainstream system, including how to navigate systems like health care, and promote its utilization, social capital is raised (Fang & Katakia, 2017).

These are two examples of promising practices with specific goals to capitalize on social support in order to increase quality of life. Healthcare, of course, also increases quality of life and so these are good ways to show how simple it can be to engage and increase social supports. While there are likely many other programs in for and non-profits globally, due to the relatively small and simple nature of the goals of ones such as these, they are not easy to locate. Ironically, this speaks to the need for these programs, as they cannot be utilized, if they cannot be found. Like the Public Health Agency of Canada grant, discussed above, publicity is essential with any immigrant geared program. Government briefings for the European union also advocate for a need for immigrant focused healthcare initiatives. The European Commission (2020) specifically point out the importance of connecting immigrants with host societies, and cross cultural dialogic. In

Communication from the Commission to the European Parliament (European Commission, 2020), policy makers stress that this cannot be possible without providing opportunities to do so, but that both host and immigrant communities can only benefit from this increased collaboration. This document however, while robust is abstract in how to enact these goals. This study provides one concrete way to enact the goal of healthier communities; through encouraging programming that focuses on connections made directly at individual levels. While this recommendation document is thorough, there are no concrete benchmarks to evaluate progress. In this way, the European Commission (2020) signals an interest in supporting immigrant health but lacks mechanism for meaningful evaluation of recommendations made.

One example locally of a meaningful intervention can be seen in the additions of Ontario Health Teams and Local Immigration Partnerships. Local Immigration Partnership (LIP) networks are examples of such collaboration. These partnerships exist in local municipalities, funded in part by Immigration Citizenship Canada (Pathways to Prosperity, 2023). The LIP focuses on opportunities to share learning and programming across platforms with member agencies both in and out of the settlement sector. LIP meetings help to connect staff at agencies to each other in order to increase collaboration, and in turn social supports for staff and connections between agencies serving similar populations. Through highlighting the findings of this study at the LIP level, their work can be validated, and member agencies can be encouraged to explore the ways in which they are connecting with each other- especially across settlement and healthcare sectors. Initiated in 2008, these partnerships exist across the country and have helped to connect both agencies to each other and to align these community agencies with government priorities regarding settlement (Pero, 2017). Another increasingly common example outside of the settlement sector can be seen in the Ontario Health Team (OHT) model, is similar to LIP, but

driven from the focus of health care and helping various community resources better connect to both staff and resources within the healthcare system. The OHT seeks to tighten connections between patients, families and healthcare systems through greater communication across agencies, resulting a larger healthcare team that can more seamlessly connect with relevant stakeholders (Ministry of Health and Long term Care, 2022).

The OHT model can help to increase an immigrant's social capital as they can now interact with a broader spectrum of healthcare providers more seamlessly. Similarly, social support is raised across agencies and healthcare providing services through increased collaboration, raising professional social capital as well. The importance of inter and cross communication and collaboration in order to augment levels of social support is also important at the systems level; between settlement agencies themselves, between settlement and mainstream and mainstream system. Drolet & Wu (2017) make the good point that many immigrants will move within Canada after arrival, which may further exacerbate the settlement process, especially in the formation of social networks at the local level. They highlight the importance of social capital in the settlement process, adding that is not automatically present but need to be fostered by both formal and informal networks over time. As much healthcare requires physical presence, this makes the protective factor social support regarding healthcare utilization potentially more precarious.

Regarding general public programming as a rubric, many regions have public services that offer 'wellness checks' for new mothers, that may include resources such as baby needs, or maternal metal health referrals (Ottawa Public Health, 2023). A similar policy to connect with all new arrivals to Canada in order to share resources and offer 'warm handoff' to settlement and other supports could be really helpful. While many immigrants do access settlement supports, not all do and here is not a direct line from arrival to a settlement agency, even though both are

coordinated through the Immigration, Refugee, Citizenship Canada ministry. This is where those who arrive as Government Assisted Refugees (GAR) and those who arrive through permits or a permanent residents differ. The GAR 'wrap around' program includes intensive case management, referrals and check ins for the first year of life in Canada (Government of Canada. 2022b). Those who are not GARs do not receive this level of support. Interaction with the settlement sector is semi-mandated in that immigrants must attend programs in order to receive government assistance (Government of Canada 2022b), but otherwise, no formal link is established. This would help shorten the time immigrants may struggle with accessing services by allowing the settlement sector to demystify and clarify processes. It would not help as much however, for those who may face the 'healthy immigrant effect', who will have health challenges later down the road.

While 'an ounce of prevention is a pound of cure', those who have been in Canada longer can and do remain vulnerable. This can be accounted for by policies that include asking how long people have been in country, not just citizenship status. It is well known that health cards do not track citizenship status, and so this information can get lost. While citizenship is not a requisite for healthcare- nor should it be- asking about length of time since arrival at medical appointments is a promising practice. The evidence above supports this as a promising practice as it shows that while immigrants may achieve citizenship, even years after this milestone, inequities persist. It is imperative that social workers (and others) not lose sight of this vulnerability and offer supports based not only on citizenship status but lived experience.

Lastly, Immigration Refugee, Citizenship Canada sponsors an intricate, coordinated body of services known as those in the 'settlement sector'. These are wonderful places for new arrivals to enhance language skills, connect to employment opportunities, and especially meet other newcomers (OCASI,2020)**.** All of this is positive; however, it is important to ensure that

newcomers reach beyond interacting only with newcomers, who may have no more connection to the larger community than the next. Most desirable for immigrants (and refugees) is social support that functions as a "springboard," not just a "safety net" (Simich, Beiser, Stewart & Mwarakimba, 2005; p.259).

Encountering diversity is needed as soon as possible upon arrival and, while the settlement sector provides this in terms of countries and cultures of origin, nearly all are clients who have generally recently arrived to Canada. Rather than 'outsourcing' services for newcomers to this sector specifically, greater focus must be placed on the shared responsibility of all service providers to connect with immigrants at each stage of integration (or acculturation). This responsibility therefore is shared by social workers both within and outside of the settlement sector. As discussed below in social work education, the first step in ensuring this responsibility is met is in tightening relationships that social workers have to each other, even when they are still in school. A great example of this is the 'Canada Connection' program through Immigration, Refugee Citizenship Canada, that encourages settlement agencies to link clients to citizens and larger community programming, and similar to international programming, has a volunteer component (Government of Canada, 2023d) However, this funding stream is not available to all and is only a small portion of total programming. It allows clients in the settlement sector to interact with those outside of it, but there is little encouraging interaction in the opposite direction- programs that encourage mainstream organizations to increase diversity through immigrant engagement. Incentive for other non-profits could be built into funding to encourage partnership specifically with the settlement sector. Partnership building is often a key requirement in funding agreements, this would take it one step further. Clients of settlement agencies have diverse needs

and interests that could be best met outside the sector. This could help tighten those connections, and therefore social networks, raising capital for all involved.

Social networks are also important for social workers, in education as well as practice. While, as a profession, there is an important role for social work in interdisciplinary environments, it is also crucial that social workers can interact with each other, across agencies in order to share evidence-based practices and focus on the anti-oppressive practice lens that is central to social work itself (Yan & Anucha, 2017). One example of social workers connecting across agencies can be seen in SWAG- Social Workers in Ageing Gerontology (OASW, 2009), where social workers who interact with seniors in a variety of settings can connect to network and discuss promising practices. Similar to senior services, which could be provided in an array of locations (home, community, institution etc.), immigrant services are also offered in diverse locations, though from a specific social work lens. As such, while the models of LIP and OHT are helpful across disciplines and services, a SWIS (Social Workers in Settlement) program could allow social workers to meet to explore the interactions between social work service provision, advocacy and immigrant/settlement services.

Lastly, in order for programs to succeed, clients must engage with them, representation is an important part of engagement. Specifically, when people see others who look like them, sound like them, or otherwise share similarities, they are more likely to engage. The more diversity is encouraged and supported in positions of service provision, healthcare or otherwise, the more representation immigrants will find within those services. For example, the Canadian Medical Association, recently highlighted one Black doctor, Joseph Conde, working in rural Quebec who shares the importance of such representation (Canadian Medical Association, 2023).

Implications for Social Work Education

Implications for social work education abound in this study of the protective relationship of social support and healthcare utilization for immigrants. Even before the exploration of how to convey the results of this work to students in order to support clients, it is important to explore the implications of these findings for students themselves. This dissertation has explained the central role of social support in many aspects of life, and education should be no different. Similar to settling into a new country with new norms and expectations, students settle into a new level and field of study with social work. In this way, social support is also a central part of students' potential success. While the questions may vary and those on social provisions scale not be a perfect fit for this analogy, the power of community still applies. Educators can work to ensure that students see each other as sources of support, along with the more formal supports available. As referenced above, systems need to work together; both in and out of the settlement sector in order to harness the power of social capital and social support. Similarly, students need to connect to each other as colleagues even within their studies to begin these relationships. This is how students can build their own social/professional capital, to be used throughout their careers as they end up in diverse fields. The only thing that truly unites immigrants is their diversity, and as such, for those who work with immigrants, especially newcomers, having connections across the lifespan may be invaluable. Education can be isolating due to competing pressures. Therefore, helping students to increase their networks and future supports is not only helpful based on the topics in this thesis, but useful as a general life skill.

Social work is at the heart of community resource navigation, and, at its core, the profession of social work rests on the ability to provide support. As such, social workers know best the invaluable nature of support- personal and professional. Further, healthcare is at the center of strong, vibrant communities, something social work strives to support. In these ways, understanding social support and healthcare utilization are a main focus of social work values and therefore must be a key component of education. As globalization speeds up, and with it immigration, understanding how these intersections affect those who come from away is even more important.

Social workers are increasingly challenged to do more with less, so understanding how to harness existing (i.e., free) resources like social support will be crucial. Social work can often be taught from a variety of models, including medical and/or philanthropic. Each of these places expertise in the hands of the professional or the 'giver', rather than a social, collaborative model in which power is shared. The sharing of power, through resources and networks is central to this dissertation. This thesis has shown that it is connections across and within communities that will increase rates of healthcare utilization. Social work education should remain focused on infusing the importance of communities to each other in lesson planning, i.e. client to client, rather than the current heavy focus on professional to client. One way that social work education could help foster this deep understanding of the role of social support could be through group work assignments. Specifically, with a shared goal, students are forced to come together across sometimes significant differing personal contexts. This experience in collaboration towards a project encourages students to practice connecting with others that would otherwise not have a chance to interact with. This literally brings social networking into the classrooms. Students will interact with each other and meet the goal of the assignment through a division of labour based on

skills and resources. This is not entirely unlike what would happen in a larger social network across communities outside of the classroom.

In many settings, social work is part of interdisciplinary health teams, and part of healthcare. Any additional knowledge surrounding the use of healthcare systems, especially for some of Canada's most vulnerable residents is helpful. Simply put, more information about clients and their choices is always a good thing, especially when it come directly from them. The process of social work education is largely based on understanding the sociopolitical contexts in which people life in order to help them thrive. In order to truly view these results through an intersectional lens, future research, and social work practice will need to include the countries of origin of immigrants, not only to understand factors like race and language but also their history in Canada. In this way, findings about the protective power of social support can be explored through both historical and modern contexts of power and privilege. (Yan & Anucha,2017).

Implications for Future Social Work Research

Many opportunities exist for future research in the area(s) of social support and healthcare utilization for immigrants. The first place to look for these opportunities is in the limitations section. These results contained here could be enriched by more specific variable responses, especially around ethnicity and country of origin and other demographic factors that could influence the level of activity or engagement with a local community and/or the healthcare. Through using less restricted data (rather than public), future research could flush out not only nuances between specific cultures, but also languages spoken, and even possibly systems of social capital.

Further, the previous discussions on the limitations of quantitative research underscores the potential to expand and/or triangulate the findings of this work with a qualitative exploration along similar themes. Qualitative research and other triangulation could offer a chance to explore definitions of social support to a greater degree, including the location(s) of support. There are several pathways to expansion for this research, most basically, by allowing space for interviewers to capture supporting commentary during the administration of this otherwise quantitative survey instrument. Further, this exploration could allow for probing questions to the variables above including an opportunity to explore the ways in which health and social support are defined differently across groups. Another possibility for qualitative study lies in seeking to understand how/if utilization patterns shift intergenerationally after arrival. The location of support may be of particular interest when discussing healthcare utilization in the local geographic context.

As previously stated through the theoretical framework of this study, the power of social networks can influence behavior, even more so for those who are forming them as new(er) arrivals to Canada. The location of this support could mean that they do hold geographically relevant connections, or not, based on where they are located. Especially in light of the proliferation of online communication post pandemic, proximity to supports may be differently relevant than they once were. Further, potential exists for a comparison of the results stated above with those born in Canada, to better understand the effects of coming from abroad across a lifetime, rather than just before or after ten years of arrival. Each of various stages of analysis above showed a number of statistically significant relationships between various sociodemographic variables and healthcare utilization when measured as having a healthcare provider, a place to go for minor concern, or an unmet healthcare need. These relationships were not explored in full depth, as they were not part of the central research question in this study, but each may tell an interesting story of the

protective nature of sociodemographic variables relating to healthcare utilization for immigrants to Canada.

The literature cited in this study has highlighted the many central ways that social support can affect health outcomes. In this way, opportunities for future research exist in the relationships(s) between social support and other health related behaviours asked about in the Canadian Community Health Study. These could include revealing connections between levels of social support and specific diagnosis, or even behavioural choices.

Lastly, future research includes actions based on the implications of this study for social work practice, policy, and education. Social work is a profession based on relationships with others and to ourselves, which is also at the heart of social support. Social work is also a discipline dedicated to health, and healthy outcomes. The first step towards these healthy outcomes lies in recognizing what already is, in order to build on what is next to come.

Conclusion

This study used a theoretical framework based on the relationships of social capital, and social cognitive theory to explore the protective connections between healthcare utilization and social support for immigrants to Canada with a focus on length of time in Canada. In order to best understand this connection, variables including sex, province of residence, income, self-rated health, length of time in Canada, race, marital status, and scores on the Social Provisions Scale (Cutrona &Russell,1987), were considered. In short, this study sought to understand what power social support may have in predicting healthcare utilization for those not born in Canada. Findings showed that, for the most part, social support, as measured by scores on the social provisions scale (Cutrona & Russel, 1987) is often significant in determining healthcare utilization. While there are limitations to this study including those noted above, opportunities exist in social work education,

research, and practice to better explore these intersections in order to increase healthcare utilization, and ultimately community health. Good questions, like the ones asked above, generate additional questions and in this case, opportunities for future research.

Findings of this study have implications for social work practice, policy, education and research in a number of ways, and are especially powerful when connected to the theoretical framework of this study. The CCHS by nature as a large, national survey is self-report, and so, relies on perceptions of access and utilization of responses. Social cognitive theory is used in this study to highlight this point. This dissertation explores the perceptions of newcomers about whether or not they feel they have access to, and therefore used healthcare services. Future research points to an opportunity to triangulate this data with other sources of health information (clinic and hospital records for example), this single database focused study instead relies on perceived available of social supports and healthcare professionals. The power of this perception is harnessed through social capital, in the networks that newcomers see themselves a part of, either idealistically or in reality. Through the protective nature of social support, this social capital can be grown through networks created by policies, programs, education and research. This study was propelled by the fact that the majority of Canada's population is made up of immigrants and or their descendants. This means that on some level, most if not all programming is designed by, with or for immigrants, even if they have arrived some time ago. The challenge, however, is in harnessing this historical memory so that even those programs designed by large governmental systems and those who have been in Canada for generations, have that core experience in mind. As people continue to land in Canada, in increasing numbers, an understanding of the vulnerabilities shift over time in country during those first years is especially crucial in securing the health and wellbeing of all Canadians.

It is impossible to center interventions within social work and not discuss social support. Social work, as a profession, is founded on the power of people's connections to each other to create change. Communities, and community interventions make up a significant portion of the role of social work in broader society, regardless of the sector. These interventions, therefore, must harness social support, both formal and informal in order to create community change. This is something that social workers have always known intuitively, and this study proves the protective nature of social support, especially for a large, diverse, vulnerable, and important group such as immigrants to Canada. This point is proven through the perceptions of immigrants themselves, through a large, national study, showing that immigrants know what is needed, and it is the responsibility of those of us already here, to listen.

REFERENCES

Adler, P. S., & Kwon, S.-W. (2002). Social capital: Prospects for a new concept. *Academy of Management Review*, *27*(1), 17–40. https://doi.org/10.5465/amr.2002.5922314

Aery, A., & McKenzie, K. (2018). *Primary-care-utilization-trajectories-for-immigrants-and-refugees-in-Ontario-compared-with-long-term-residents.* Wellesley Institute. https://www.wellesleyinstitute.com/wp-content/uploads/2018/11/Primary-care-utilization-trajectories-for-immigrants-and-refugees-in-Ontario-compared-with-long-term-residents.pdf

Ahmed, S., Shommu, N. S., Rumana, N., Barron, G. R. S., Wicklum, S., & Turin, T. C. (2016). Barriers to access of primary healthcare by immigrant populations in Canada. *Journal of Immigrant and Minority Health*, *18*(6), 1522–1540. https://doi.org/10.1007/s10903-015-0276-z

Akbari, A. H., & MacDonald, M. (2014). Immigration policy in Australia, Canada, New Zealand, and the United States: An overview of recent trends. *International Migration Review*, *48*(3), 801–822. https://doi.org/10.1111/imre.12128

Alberta Health Services. (2022). *Healthy Albertans, healthy communities, together.* https://www.albertahealthservices.ca/

Alcaraz, K. I., Eddens, K. S., Blase, J. L., Diver, W. R., Patel, A. V., Teras, L. R., Stevens, V. L., Jacobs, E. J., & Gapstur, S. M. (2019). Social isolation and mortality in US Black and white men and women. *American Journal of Epidemiology*, *188*(1), 102–109. https://doi.org/10.1093/aje/kwy231

Almeida, J., Subramanian, S. V., Kawachi, I., & Molnar, B. E. (2011). Is blood thicker than water? Social support, depression and the modifying role of ethnicity/nativity status. *Journal of Epidemiology and Community Health*, *65*(1), 51–56. https://doi.org/10.1136/jech.2009.092213

Anucha, U., Dlamini, N. S., Yan, M. C., & Smylie, L. (2006). Social capital and the welfare of immigrant women: A multi-level study of four ethnic communities in Windsor. *Status of Women Canada's Policy Research Fund*.

Asada, Y., & Kephart, G. (2007). Equity in health services use and intensity of use in Canada. *BMC Health Services Research*, *7*(1), 41. https://doi.org/10.1186/1472-6963-7-41

AUS, 2023 *Refugee Support Project,* https://aus.is/refugee-support-project/

Awad, E., & Teixeira, C. (2014). Barriers faced by new immigrants in accessing health care services in a mid-sized Canadian city. In *Proceedings of the 1st Mediterranean Interdisciplinary Forum on Social Sciences and Humanities* (pp. 294–298). European Scientific Institute.

Babitsch, B., Gohl, D., & von Lengerke, T. (2012). Re-revisiting Andersen's behavioral model of health services use: A systematic review of studies from 1998-2011. *Psychosocial Medicine*, *9*, Doc11. https://doi.org/10.3205/psm000089

Bacila, S. C. (2016). *About the Canadian Community Health Survey (CCHS).* Peel Region. https://www.peelregion.ca/health/statusdata/DataSources/HSD12_2.asp

Bajgain, B. B., Bajgain, K. T., Badal, S., Aghajafari, F., Jackson, J., & Santana, M.-J. (2020). Patient-reported experiences in accessing primary healthcare among immigrant population in Canada: A rapid literature review. *International Journal of Environmental Research and Public Health*, *17*(23). https://doi.org/10.3390/ijerph17238724

Balneaves, L. G., Bottorff, J. L., Grewal, S. K., Naidu, P., Johnson, J. L., & Howard, A. F. (2007). Family support of immigrant Punjabi women with breast cancer. *Family & Community Health*, *30*(1), 16–28. https://doi.org/10.1097/00003727-200701000-00004

Bandura, A. (1989). Social cognitive theory. In R. Vasta (Ed.), *Annals of Child Development. Six Theories of Child Development* (Vol. 6, pp. 1–60). JAI Press. https://www.scirp.org/(S(czeh2tfqyw2orz553k1w0r45))/reference/referencespapers.aspx?referenceid=1174203

Bandura, A. (1998). Health promotion from the perspective of social cognitive theory. *Psychology & Health*, *13*(4), 623–649. https://doi.org/10.1080/08870449808407422

Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology*, *52*, 1–26. https://doi.org/10.1146/annurev.psych.52.1.1

Bandura, A. (2002). Social cognitive theory in cultural context. *Applied Psychology*, *51*(2), 269–290. https://doi.org/10.1111/1464-0597.00092

Bandura, A. (2004). Health promotion by social cognitive means. *Health Education & Behavior*, *31*(2), 143–164. https://doi.org/10.1177/1090198104263660

Béland, Y. (2005). Canadian community health survey-methodological overview. *Health Reports*, *13*(3), 9–14.

Berry, J. W. (2005). Acculturation: Living successfully in two cultures. *International Journal of Intercultural Relations*, *29*(6), 697–712. https://doi.org/10.1016/j.ijintrel.2005.07.013

Berry, J. W. (2006). Contexts of acculturation. In D. L. Sam & J. W. Berry (Eds.), *The Cambridge Handbook of Acculturation Psychology* (pp. 27–42). Cambridge University Press.

Berry, J. W. (2006). Stress perspectives on acculturation. In D. L. Sam & J. W. Berry (Eds.), *The Cambridge Handbook of Acculturation Psychology* (pp. 43–57). Cambridge University Press.

Betz, N. E., & Klein, K. L. (1996). Relationships among measures of career self-efficacy, generalized self-efficacy, and global self-esteem. *Journal of Career Assessment, 4*(3), 285–298. https://doi.org/10.1177/106907279600400304

Bloch, G., Rozmovits, L., & Giambrone, B. (2011). Barriers to primary care responsiveness to poverty as a risk factor for health. *BMC Family Practice, 12*(1), 62. https://doi.org/10.1186/1471-2296-12-62

Boswell, R. (2019). STATCAN' s century: A national institution, a family tradition and a challenging future. *Canadian Issues,* 3–6. https://acs-metropolis.ca/wp-content/uploads/2021/04/bm8FFRBJtbzVZnKpusqs.pdf

Bourdieu, P. (1986). The forms of capital. In J. G. Richards (Ed.), *Handbook of theory and research for the sociology of education* (pp. 241–258). Greewood.

Bowling, A. (2005). Just one question: If one question works, why ask several? *Journal of Epidemiology and Community Health*, *59*(5), 342–345. https://doi.org/10.1136/jech.2004.021204

Boxman, E. A.W., Graaf, P. M. de, & Flap, H. D. (1991). The impact of social and human capital on the income attainment of dutch managers. *Social Networks, 13*(1), 51–73. https://doi.org/10.1016/0378-8733(91)90013-J

Boyd, M., & Vickers, M. (2000). 100 years of immigration in Canada. *Canadian Social Trends*, *58*(2), 2–12.

Caldwell, S. (2007). *Statistics unplugged*. Wadsworth/Thompson (2nd ed.). Cengage Learning.

Campbell, R. M., Klei, A. G., Hodges, B. D., Fisman, D., & Kitto, S. (2014). A comparison of health access between permanent residents, undocumented immigrants and refugee claimants in toronto, Canada. *Journal of Immigrant and Minority Health*, *16*(1), 165–176. https://doi.org/10.1007/s10903-012-9740-1

Canada Health Act. (2023). *Revised statutes of Canada; 1984. c. 6, s. 1*. http://laws-lois.justice.gc.ca/PDF/c-6.pdf

Canadian Institute for Health Information. (2015). *National health expenditures and MIS reporting*. https://www.cihi.ca/en/spending-and-health-workforce/spending

Canadian Research Data Centre Networks. (2016). *LFS (Labour Force Survey)*. https://crdcn.org/datasets/lfs-labour-force-survey

Caron, J. (2012). Predictors of quality of life in poor population of Montreal. *Social Indicators Research*, *107*(3), 411–427. https://doi.org/10.1007/s11205-011-9855-0

Caron, J. (2013). Une validation de la forme abrégée de l'Échelle de provisions sociales: L'ÉPS-10 items [A validation of the Social Provisions Scale: The SPS-10 items]. *Sante Mentale Au Quebec*, *38*(1), 297–318. https://doi.org/10.7202/1019198ar

Carpiano, R. M., & Hystad, P. W. (2011). Sense of community belonging" in health surveys: What social capital is it measuring. *Health & Place*, *17*(2), 606–617. https://doi.org/10.1016/j.healthplace.2010.12.018

Carrière, G., Peters, P. A., & Sanmartin, C. (2012). Area-based methods to calculate hospitalization rates for the foreign-born population in Canada, 2005/2006. *Health Reports*, *23*(3), 43–51.

Carrillo, J. E., Carrillo, V. A., Perez, H. R., Salas-Lopez, D., Natale-Pereira, A., & Byron, A. T. (2011). Defining and targeting health care access barriers. *Journal of Health Care for the Poor and Underserved*, *22*(2), 562–575. https://doi.org/10.1353/hpu.2011.0037

Chadwick, K. A., & Collins, P. A. (2015). Examining the relationship between social support availability, urban center size, and self-perceived mental health of recent immigrants to Canada: A mixed-methods analysis. *Social Science & Medicine (1982)*, *128*, 220–230. https://doi.org/10.1016/j.socscimed.2015.01.036

Chen, G., Gully, S. M., & Eden, D. (2004). General self-efficacy and self-esteem: Toward theoretical and empirical distinction between correlated self-evaluations. *Journal of Organizational Behavior*, *25*(3), 375–395. https://doi.org/10.1002/job.251

Chen, J. M., Kim, H. S., Mojaverian, T., & Morling, B. (2012). Culture and social support provision: Who gives what and why. *Personality & Social Psychology Bulletin*, *38*(1), 3–13. https://doi.org/10.1177/0146167211427309

Cheng, L., Spaling, M., & Song, X. (2013). Barriers and facilitators to professional licensure and certification testing in Canada: Perspectives of internationally educated professionals. *Journal of International Migration and Integration*, *14*(4), 733–750. https://doi.org/10.1007/s12134-012-0263-3

Chui, T., Tran, K., & Maheux, H. (2009). *2006 census: Immigration in Canada: A portrait of the foreign-born population, 2006 census: Findings*. https://www12.statcan.gc.ca/census-recensement/2006/as-sa/97-557/index-eng.cfm

Clark, N. M., & Zimmerman, B. J. (2014). A social cognitive view of self-regulated learning about health. *Health Education & Behavior*, *41*(5), 485–491. https://doi.org/10.1177/1090198114547512

Cobb, S. (1976). Social support as a moderator of life stress. *Psychosomatic Medicine, 38*(5), 300–314. https://doi.org/10.1097/00006842-197609000-00003

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Lawrence Erlbaum Associates.

Cohen, S. (2004). Social relationships and health. *The American Psychologist, 59*(8), 676–684. https://doi.org/10.1037/0003-066X.59.8.676

Cohen, S., Underwood, L. G., & Gottlieb, B. H. (2000). *Social support measurement and intervention*. Oxford University Press. https://doi.org/10.1093/med:psych/9780195126709.001.0001

Coleman, J. S. (1988). Social capital in the creation of human capital. *American Journal of Sociology, 94*, S95-S120. https://doi.org/10.1086/228943

Cone, J. D., & Foster, S. L. (2006). *Dissertations and theses from start to finish: Psychology and related fields* (2nd ed.). American Psychological Association. https://psycnet.apa.org/record/2006-04947-000

Cullen, M., & Whiteford, H. (2001). The interrelations of social capital with health and mental health. *Canberra: Commonwealth of Australia*.

Curtis, L. J., & MacMinn, W. J. (2008). Health care utilization in Canada: Twenty-five years of evidence. *Canadian Public Policy, 34*(1), 65–87. https://doi.org/10.3138/cpp.34.1.065

Cutrona, C. E., & Russell, D. W. (1987). The provisions of social relationships and adaptation to stress. *Advances in Personal Relationships, 1*(1), 37–67.

Das, M. M., & Chan, C. L. W. (2013). Uplifting social support for refugees and asylum seekers. In S. Chen (Ed.), *Social support and health: Theory, research, and practice with diverse populations* (pp. 79–92). Nova Publishers.

Degelman, M. L., & Herman, K. M. (2016). Immigrant status and having a regular medical doctor among Canadian adults. *Canadian Journal of Public Health*, *107*(1), e75-e80. https://doi.org/10.17269/cjph.107.5205

Denton, M., Prus, S., & Walters, V. (2004). Gender differences in health: A Canadian study of the psychosocial, structural and behavioural determinants of health. *Social Science & Medicine (1982)*, *58*(12), 2585–2600. https://doi.org/10.1016/j.socscimed.2003.09.008

Deri, C. (2005). Social networks and health service utilization. *Journal of Health Economics*, *24*(6), 1076–1107. https://doi.org/10.1016/j.jhealeco.2005.03.008

DiMatteo, M. R. (2004). Social support and patient adherence to medical treatment: A meta-analysis. *Health Psychology*, *23*(2), 207–218. https://doi.org/10.1037/0278-6133.23.2.207

Dion, P., Caron-Malenfant, É., Grondin, C., & Grenier, D. (2015). Long-term contribution of immigration to population renewal in Canada: A simulation. *Population and Development Review*, *41*(1), 109–126. https://doi.org/10.1111/j.1728-4457.2015.00028.x

Dlamini, S. Nombuso & Anucha, Uzo & Wolfe, Barat. (2012). Negotiated Positions Immigrant Women's Views and Experiences of Employment in Canada. Affilia. 27. 420-434. https://doi.org/10.1177/0886109912464479

Drolet, J., & Wu, H (2017). Building Inclusive and Welcoming Communities for Immigrants and Refugees. In In Yan, M. C., & Anucha, U. (2017). *Working with immigrants and refugees: Issues, theories, and approaches for social work and human service practice*. Oxford University Press.

Dunlop, S., Coyte, P. C., & McIsaac, W. (2000). Socio-economic status and the utilisation of physicians' services: Results from the Canadian national population health survey. *Social Science & Medicine*, *51*(1), 123–133. https://doi.org/10.1016/S0277-9536(99)00424-4

Dunn, J. R., & Dyck, I. (2000). Social determinants of health in Canada's immigrant population: Results from the national population health survey. *Social Science & Medicine, 51*(11), 1573–1593. https://doi.org/10.1016/S0277-9536(00)00053-8

Edge, S., & Newbold, B. (2013). Discrimination and the health of immigrants and refugees: Exploring Canada's evidence base and directions for future research in newcomer receiving countries. *Journal of Immigrant and Minority Health*, *15*(1), 141–148. https://doi.org/10.1007/s10903-012-9640-4

Elsouhag, D., Arnetz, B., Jamil, H., Lumley, M. A., Broadbridge, C. L., & Arnetz, J. (2015). Factors associated with healthcare utilization among arab immigrants and iraqi refugees. *Journal of Immigrant and Minority Health*, *17*(5), 1305–1312. https://doi.org/10.1007/s10903-014-0119-3

Eriksson, M. (2011). Social capital and health--implications for health promotion. *Global Health Action*, *4*, 5611. https://doi.org/10.3402/gha.v4i0.5611

Este, D. (2013). Social support in the lives of Sudanese refugee and Russian immigrant fathers in Canada. In S. S. Chuang & C. S. Tamis-LeMonda (Eds.), *Gender roles in immigrant families* (pp. 63–77). Springer. https://doi.org/10.1007/978-1-4614-6735-9_5

EUPATI Open Classroom. (2022). *Fundamentals of statistics: Power of a statistical test.* https://learning.eupati.eu/mod/book/view.php?id=362&chapterid=391

European Commission. (2020, November 24). *Mapping key migrant-led organizations across the EU*. https://ec.europa.eu/migrant-integration/special-feature/mapping-key-migrant-led-organisations-across-eu_en?fbclid=IwAR3i6haomYhhxNVMNUZVv7RL_W4xrahQQWWV9E6QZRM_4UX2vYEVid7dN1U

Fang,L. & Katakia, D (2017) Immigrants and Physical Health. In Yan, M. C., & Anucha, U. (2017). *Working with immigrants and refugees: Issues, theories, and approaches for social work and human service practice*. Oxford University Press.

Faul, F., Erdfelder, E., Buchner, A., & Lang, A.-G. (2013). G* power version 3.1. 7 [computer software]. *Uiversität Kiel, Germany*.

Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, *39*(2), 175–191. https://doi.org/10.3758/BF03193146

Field, A. P. (2009). *Discovering statistics using SPSS* (5th ed.). SAGE Publications, Inc.

Finfgeld-Connett, D. (2005). Clarification of social support. *Journal of Nursing Scholarship*, *37*(1), 4–9. https://doi.org/10.1111/j.1547-5069.2005.00004.x

Fiorillo, D., & Sabatini, F. (2011). Quality and quantity: The role of social interactions in self-reported individual health. *Social Science & Medicine*, *73*(11), 1644–1652. https://doi.org/10.1016/j.socscimed.2011.09.007

Foley, M. W., & Edwards, B. (1999). Is it time to disinvest in social capital? *Journal of Public Policy*, *19*(2), 141–173. https://doi.org/10.1017/S0143814X99000215

Fox, M., Thayer, Z., & Wadhwa, P. D. (2017). Assessment of acculturation in minority health research. *Social Science & Medicine*, *176*, 123–132. https://doi.org/10.1016/j.socscimed.2017.01.029

Fram, M. S. (2003). *Discussions of social capital: Social work, social structure, and the contextualization of inequality* (Publication No. 3090995) [Doctoral thesis, University of Washington]. ProQuest Dissertations & Theses Global.

Frick, U., Irving, H., & Rehm, J. (2012). Social relationships as a major determinant in the valuation of health states. *Quality of Life Research*, *21*(2), 209–213. https://doi.org/10.1007/s11136-011-9945-0

Fukuyama, F. (1997). Social capital and the modern capitalist economy: Creating a high trust workplace. *Stern Business Magazine*, *4*(1), 1–16.

Gergen, K. J., Gulerce, A., Lock, A., & Misra, G. (1996). Psychological science in cultural context. *American Psychologist*, *51*(5), 496–503. https://doi.org/10.1037/0003-066X.51.5.496

Gil-Salmerón, A., Guaita-Crespo, E., & Garcés-Ferrer, J. (2019). Differentiating specific health needs of recent homeless immigrants: Moving forward from an integrated approach to placate the "healthy immigrant effect". *International Journal of Integrated Care*, *19*(4), 621. https://doi.org/10.5334/ijic.s3621

Glanz, K., Rimer, B. K., & Lewis, F. M. (2008). *Health behavior and health education: Theory, research, and practice* (4th ed.). John Wiley & Sons.

Godley, J., & Tang, K. L. (2022). Income, education, and hospitalization in Canada: Results from linked census and administrative data. *Discover Social Science and Health*, *2*(1), 1–17. https://doi.org/10.1007/s44155-022-00023-z

Gonzales, G., & Henning-Smith, C. (2017). Barriers to care among transgender and gender nonconforming adults. *The Milbank Quarterly*, *95*(4), 726–748. https://doi.org/10.1111/1468-0009.12297

Gotay, C. C., & Wilson, M. E. (1998). Social support and cancer screening in african American, hispanic, and native American women. *Cancer Practice*, *6*(1), 31–37. https://doi.org/10.1046/j.1523-5394.1998.1998006031.x

Government of British Columbia. (2022). *Medical services plan (MSP) for British Columbia (B.C.) residents*. https://www2.gov.bc.ca/gov/content/health/health-drug-coverage/msp/bc-residents

Government of Canada. (1985). *Canada health act*. http://laws- lois.justice.gc.ca/eng/acts/c-6/

Government of Canada. (2009). *After you arrive: Health care in Canada*. http://www.cic.gc.ca/english/newcomers/after-health.asp

Government of Canada. (2013). *Medical exams*. http://www.cic.gc.ca/English/information/medical/index.asp

Government of Canada. (2014a). *Facts and figures 2014--immigration overview: Permanent residents*. http://www.cic.gc.ca/english/study/study-minors.asp

Government of Canada. (2015a). *Determine your eligibility--citizenship*. http://www.cic.gc.ca/english/citizenship/become-eligibility.asp

Government of Canada. (2015b). *Indicators of well-being in Canada*. http://well-being.esdc.gc.ca/misme-iowb/.3ndic.1t.4r@-eng.jsp?iid=38

Government of Canada. (2017). *Table 1: Permanent residents admitted in 2017, by top 10 source countries*. https://www.Canada.ca/en/immigration-refugees-citizenship/corporate/publications-manuals/annual-report-parliament-immigration-2018/permanent-residents-admitted.html

Government of Canada. (2018a). *2018 annual report to parliament on immigration*. https://www.Canada.ca/en/immigration-refugees-citizenship/corporate/publications-manuals/annual-report-parliament-immigration-2018/report.html

Government of Canada. (2018b). *Immigration, refugees and citizenship Canada departmental plan 2018-2019*. https://www.Canada.ca/en/immigration-refugees-citizenship/corporate/publications-manuals/departmental-plan-2018-2019/departmental-plan.html

Government of Canada. (2019). *Canada's health care system*. https://www.Canada.ca/en/health-Canada/services/health-care-system/reports-publications/health-care-system/Canada.html#a3

Government of Canada. (2022a). *Medical exams*. https://www.canada.ca/en/immigration-refugees-citizenship/services/application/medical-police/medical-exams.html

Government of Canada. (2022b). *Government-assisted refugee program*. https://www.canada.ca/en/immigration-refugees-citizenship/services/refugees/help-outside-canada/government-assisted-refugee-program.html

Government of Canada (2022c) *Immigration Matters in Healthcare* https://www.canada.ca/en/immigration-refugees-citizenship/campaigns/immigration-matters/growing-canada-future/health.html

Government of Canada. (2023a). *Comprehensive ranking system (CRS) tool: Skilled immigrants (express entry)*. https://www.cic.gc.ca/english/immigrate/skilled/crs-tool.asp

Government of Canada. (2023b) *Canada welcomes historic number of newcomers in 2022*. https://www.canada.ca/en/immigration-refugees-citizenship/news/2022/12/canada-welcomes-historic-number-of-newcomers-in-2022.html

Government of Canada (2023c)*Settlement Program* https://www.canada.ca/en/immigration-refugees-citizenship/corporate/transparency/program-terms-conditions/settlement.html

Government of Canada (2023d) *Canada Connects* https://www.canada.ca/en/immigration-refugees-citizenship/campaigns/canada-connects.html

Government of Newfoundland and Labrador. (2023). *Medical care plan (MCP) - health and community services: Medical plan coverage.* https://www.gov.nl.ca/hcs/mcp/

Government of Ontario. (2012). *Health services—Ontario health insurance (OHIP): Publications: Public information: MOHLTC*. http://www.health.gov.on.ca/en/public/publications/ohip/services.aspx

Government of Ontario. (2014). *Ontario Health Insurance eligibility*. http://www.health.gov.on.ca/en/public/publications/ohip/ohip_eligibility.aspx

Government of Prince Edward Island. (2022). *Apply for PEI health card*: *New residents*. https://www.princeedwardisland.ca/en/service/apply-for-pei-health-card-new-residents

Grimm, L. G., & Yarnold, P. R. (1995). *Reading and understanding multivariate statistics*. American Psychological Association.

Grossman, M. (1972). On the concept of health capital and the demand for health. *The Journal of Political Economy*, *80*(2), 223–255. https://doi.org/10.1086/259880

Gruber, J. (2022). Financing health care delivery. *Annual Review of Financial Economics*, *14*(1), 209–229. https://doi.org/10.1146/annurev-financial-111620-112740

Guertin, J. R., Feeny, D., & Tarride, J.-E. (2018). Age- and sex-specific Canadian utility norms, based on the 2013-2014 Canadian community health survey. *Canadian Medical Association Journal*, *190*(6), E155-E161. https://doi.org/10.1503/cmaj.170317

Hahn, R. A., & Truman, B. I. (2015). Education improves public health and promotes health equity. *International journal of health services*, *45*(4), 657-678.

Hanley, J., Mhamied, A. A., Cleveland, J., Hajjar, O., Hassan, G., Ives, N., Khyar, R., & Hynie, M. (2018). The social networks, social support and social capital of syrian refugees privately sponsored to settle in montreal: Indications for employment and housing during their early experiences of integration. *Canadian Ethnic Studies*, *50*(2), 123–148. https://doi.org/10.1353/ces.2018.0018

Higginbottom, G., & Safipour, J. (2015). Access to primary health care by new and established immigrants in Canada. *Journal of Family Medicine & Community Health*, *2*(5), 1–7. https://www.diva-portal.org/smash/get/diva2:854456/FULLTEXT01.pdf

Holt-Lunstad, J. (2017). The potential public health relevance of social isolation and loneliness: Prevalence, epidemiology, and risk factors. *Public Policy & Aging Report*, *27*(4), 127–130. https://doi.org/10.1093/ppar/prx030

Holt-Lunstad, J. (2018). Why social relationships are important for physical health: A systems approach to understanding and modifying risk and protection. *Annual Review of Psychology*, *69*, 437–458. https://doi.org/10.1146/annurev-psych-122216-011902

Holt-Lunstad, J. (2021). The major health implications of social connection. *Current Directions in Psychological Science*, *30*(3), 251–259. https://doi.org/10.1177/0963721421999630

Holt-Lunstad, J., Robles, T. F., & Sbarra, D. A. (2017). Advancing social connection as a public health priority in the United States. *The American Psychologist*, *72*(6), 517–530. https://doi.org/10.1037/amp0000103

Holt-Lunstad, J., Smith, T. B., Baker, M., Harris, T., & Stephenson, D. (2015). Loneliness and social isolation as risk factors for mortality: A meta-analytic review. *Perspectives on Psychological Science*, *10*(2), 227–237. https://doi.org/10.1177/1745691614568352

Hosmer, D. W., Lemeshow, S., & Sturdivant, R. X. (2013). *Applied logistic regression* (3rd ed.). John Wiley & Sons. https://doi.org/10.1002/9781118548387

Hotte, J. (2018). *Examining the socioeconomic patterns of service utilization among Canadian women at risk for developing eating disorders: A prevalence study* [Doctoral dissertation, University of Windsor].

Hutchison, B. (2013). Reforming Canadian primary care – don't stop half-way. *Healthcare Policy*, *9*(1), 12–25. https://doi.org/10.12927/hcpol.2013.23481

Hutchison, B., & Glazier, R. (2013). Ontario's primary care reforms have transformed the local care landscape, but a plan is needed for ongoing improvement. *Health Affairs*, *32*(4), 695–703. https://doi.org/10.1377/hlthaff.2012.1087

IBM Corporation. (2020).0 *SPSS statistics* for windows (version 26.0). IBM.

Ichou, M., & Wallace, M. (2019). The healthy immigrant effect: The role of educational selectivity in the good health of migrants. *Demographic Research*, *40*, 61–94. https://doi.org/10.4054/DemRes.2019.40.4

Inglehart, R. (1997). Culture and democracy. In L. E. Harrison & S. P. Huntington (Eds.), *Culture matters: How values shape human progress* (pp. 80–97). Basic Books.

Kalich, A., Heinemann, L., & Ghahari, S. (2016). A scoping review of immigrant experience of health care access barriers in Canada. *Journal of Immigrant and Minority Health*, *18*(3), 697–709. https://doi.org/10.1007/s10903-015-0237-6

Karimi, A. (2020). Limits of social capital for refugee integration: The case of gay iranian male refugees' integration in Canada. *International Migration*, *58*(5), 87–102. https://doi.org/10.1111/imig.12691

Kawachi, I., Kim, D., Coutts, A., & Subramanian, S. V. (2004). Commentary: Reconciling the three accounts of social capital. *International Journal of Epidemiology*, *33*(4), 682-690; discussion 700-4. https://doi.org/10.1093/ije/dyh177

Kazemipur, A. (2004). *Social capital of immigrants in Canada* (Working Paper Series No. WP04-04). Prairie Centre of Excellence for Research on Immigration and Integration.

Kimbro, R. T. (2009). Acculturation in context: Gender, age at migration, neighborhood ethnicity, and health behaviors. *Social Science Quarterly*, *90*(5), 1145–1166. https://doi.org/10.1111/j.1540-6237.2009.00651.x

Kitchen, P., Williams, A., & Chowhan, J. (2012). Sense of community belonging and health in Canada: A regional analysis. *Social Indicators Research*, *107*(1), 103–126. https://doi.org/10.1007/s11205-011-9830-9

Kobayashi, K., Vang, Z., & Lee, S. M. (2015). (In) Visible minorities in Canadian health data and research. Population change and lifecourse strategic knowledge cluster.

Lall, R. (2016). How multiple imputation makes a difference. *Political Analysis*, *24*(4), 414–433. https://doi.org/10.1093/pan/mpw020

Lamba, N. K., & Krahn, H. (2003). Social capital and refugee resettlement: The social networks of refugees in Canada. *Journal of International Migration and Integration*, *4*(3), 335–360. https://doi.org/10.1007/s12134-003-1025-z

Lane, G., & Vatanparast, H. (2022). Adjusting the Canadian healthcare system to meet newcomer needs. *International Journal of Environmental Research and Public Health*, *19*(7). https://doi.org/10.3390/ijerph19073752

Laroche, M. (2000). Health status and health services utilization of Canada's immigrant and non-immigrant populations. *Canadian Public Policy*, *26*(1), 51. https://doi.org/10.2307/3552256

Lavrakas, P. (2008). *Encyclopedia of survey research methods*. SAGE Publications, Inc. https://doi.org/10.4135/9781412963947

Lebrun, L. A. (2012). Effects of length of stay and language proficiency on health care experiences among immigrants in Canada and the United States. *Social Science & Medicine*, *74*(7), 1062–1072. https://doi.org/10.1016/j.socscimed.2011.11.031

Lee, S.-Y. D., Arozullah, A. M., & Cho, Y. I. (2004). Health literacy, social support, and health: A research agenda. *Social Science & Medicine*, *58*(7), 1309–1321. https://doi.org/10.1016/S0277-9536(03)00329-0

Leigh-Hunt, N., Bagguley, D., Bash, K., Turner, V., Turnbull, S., Valtorta, N., & Caan, W. (2017). An overview of systematic reviews on the public health consequences of social isolation and loneliness. *Public Health*, *152*, 157–171. https://doi.org/10.1016/j.puhe.2017.07.035

Levesque, J.-F., Harris, M. F., & Russell, G. (2013). Patient-centred access to health care: Conceptualising access at the interface of health systems and populations. *International Journal for Equity in Health*, *12*, 18. https://doi.org/10.1186/1475-9276-12-18

Lim, M. H., Eres, R., & Vasan, S. (2020). Understanding loneliness in the twenty-first century: An update on correlates, risk factors, and potential solutions. *Social Psychiatry and Psychiatric Epidemiology*, *55*(7), 793–810. https://doi.org/10.1007/s00127-020-01889-7

Lin, N. (2001). *Social capital: A theory of social structure and action*. Cambridge University Press. https://doi.org/10.1017/CBO9780511815447

Little, R. J. A. (1988). A test of missing completely at random for multivariate data with missing values. *Journal of the American Statistical Association*, *83*(404), 1198–1202. https://doi.org/10.1080/01621459.1988.10478722

Liu, Y.-B., Hou, P., Xue, H.-P., Mao, X.-E., & Li, Y.-N. (2019). Social support, health literacy, and health care utilization among older adults. *Asia-Pacific Journal of Public Health*, *31*(4), 359–366. https://doi.org/10.1177/1010539519851674

Lu, C., & Ng, E. (2019). Healthy immigrant effect by immigrant category in Canada. *Health Reports*, *30*(4), 3–11.

Luiking, M.-L., Heckemann, B., Ali, P., Dekker-van Doorn, C., Ghosh, S., Kydd, A., Watson, R., & Patel, H. (2019). Migrants' healthcare experience: A meta-ethnography review of the literature. *Journal of Nursing Scholarship*, *51*(1), 58–67. https://doi.org/10.1111/jnu.12442

Lum, I. D., Swartz, R. H., & Kwan, M. Y. W. (2016). Accessibility and use of primary healthcare for immigrants living in the Niagara region. *Social Science & Medicine*, *156*, 73–79. https://doi.org/10.1016/j.socscimed.2016.03.024

Lynch, J., Due, P., Muntaner, C., & Smith, G. D. (2000). Social capital--is it a good investment strategy for public health? *Journal of Epidemiology and Community Health*, *54*(6), 404–408. https://doi.org/10.1136/jech.54.6.404

Magnan, S.(2017). Social Determinants of Health 101 for Health Care: Five Plus Five. *NAM Perspectives*. Discussion Paper, National Academy of Medicine, Washington, DC. https://doi.org/10.31478/201710c

Mahabir, D. F., O'Campo, P., Lofters, A., Shankardass, K., Salmon, C., & Muntaner, C. (2021). Experiences of everyday racism in Toronto's health care system: A concept mapping study.

International Journal for Equity in Health, *20*(1), 74. https://doi.org/10.1186/s12939-021-01410-9

Marmot, M. (2005). Social determinants of health inequalities. *Lancet*, *365*(9464), 1099–1104. https://doi.org/10.1016/S0140-6736(05)71146-6

Marmot, M., & Wilkinson, R. G. (Eds.). (2003). *Social determinants of health: The solid facts.* World Health Organization.

Martin, C. A., Rivera, D. E., Riley, W. T., Hekler, E. B., Buman, M. P., Adams, M. A., & King, A. C. (2014). A dynamical systems model of social cognitive theory. In 2014 American Control Conference (Ed.), *Consensus-based cooperative formation control with collision avoidance for a multi-uav system* (pp. 2407–2412). IEEE. https://doi.org/10.1109/ACC.2014.6859463

Martin, D., Miller, A. P., Quesnel-Vallée, A., Caron, N. R., Vissandjée, B., & Marchildon, G. P. (2018). Canada's universal health-care system: Achieving its potential. *Lancet*, *391*(10131), 1718–1735. https://doi.org/10.1016/S0140-6736(18)30181-8

McCarthy, M. (2000). Social determinants and inequalities in urban health. *Reviews on Environmental Health*, *15*(1-2), 97–108. https://doi.org/10.1515/reveh.2000.15.1-2.97

Mcauliffe, M. & Triandafyllido (EDS),(2021). World Migration Report 2022. International Organization for Migration (IOM), Geneva.

McKeary, M., & Newbold, B. (2010). Barriers to care: The challenges for Canadian refugees and their health care providers. *Journal of Refugee Studies*, *23*(4), 523–545. https://doi.org/10.1093/jrs/feq038

McMichael, C., & Manderson, L. (2004). Somali women and well-being: Social networks and social capital among immigrant women in Australia. *Human Organization*, *63*(1), 88–99. https://doi.org/10.17730/humo.63.1.nwlpjdj4d4l9756l

Miilunpalo, S., Vuori, I., Oja, P., Pasanen, M., & Urponen, H. (1997). Self-rated health status as a health measure: The predictive value of self-reported health status on the use of physician services and on mortality in the working-age population. *Journal of Clinical Epidemiology*, *50*(5), 517–528. https://doi.org/10.1016/S0895-4356(97)00045-0

Ministry of Health and Long Term Care (2022). A plan to accelerate Ontario's health teams https://health.gov.on.ca/en/pro/programs/connectedcare/oht/docs/OHT_path_forward.pdf

Moore, S., & Kawachi, I. (2017). Twenty years of social capital and health research: A glossary. *Journal of Epidemiology and Community Health*, *71*(5), 513–517. https://doi.org/10.1136/jech-2016-208313

Morassaei, S., Irvin, E., Smith, P. M., Wilson, K., & Ghahari, S. (2022). The role of immigrant admission classes on the health and well-being of immigrants and refugees in Canada: A scoping review. *Journal of Immigrant and Minority Health*, *24*(4), 1045–1060. https://doi.org/10.1007/s10903-022-01352-6

Morissette, R., & Sultan, R. (2013). *Twenty years in the careers of immigrant and native-born workers*. Statistics Canada. http://www.statcan.gc.ca/pub/11-626-x/11-626-x2013032-eng.htm

Muggah, E., Dahrouge, S., & Hogg, W. (2012). Access to primary health care for immigrants: Results of a patient survey conducted in 137 primary care practices in Ontario, Canada. *BMC Family Practice*, *13*, 128. https://doi.org/10.1186/1471-2296-13-128

Munro, S., Lewin, S., Swart, T., & Volmink, J. (2007). A review of health behaviour theories: How useful are these for developing interventions to promote long-term medication adherence for tb and HIV/AIDS? *BMC Public Health*, *7*(1), 104. https://doi.org/10.1186/1471-2458-7-104

Muntaner, C., Lynch, J., & Smith, G. D. (2000). Social capital and the third way in public health. *Critical Public Health*, *10*(2), 107–124. https://doi.org/10.1080/713658240

Na, L., & Hample, D. (2016). Psychological pathways from social integration to health: An examination of different demographic groups in Canada. *Social Science & Medicine*, *151*, 196–205. https://doi.org/10.1016/j.socscimed.2016.01.007

Nakhaie, R., & Arnold, R. (2010). A four year (1996-2000) analysis of social capital and health status of Canadians: The difference that love makes. *Social Science & Medicine (1982)*, *71*(5), 1037–1044. https://doi.org/10.1016/j.socscimed.2010.05.033

Narine, J. (2019). *Social capital and sense of belonging among immigrant groups in Canada* [Master's thesis, University of Manitoba]. https://mspace.lib.umanitoba.ca/xmlui/handle/1993/34094

Newbold, K. B. (2005). Self-rated health within the Canadian immigrant population: risk and the healthy immigrant effect. *Social science & medicine*, *60*(6), 1359-1370. https://doi.org/10.1016/j.socscimed.2004.06.048

Newbold, K. B. (2009). Health care use and the Canadian immigrant population. *International Journal of Health Services: Planning, Administration, Evaluation*, *39*(3), 545–565. https://doi.org/10.2190/HS.39.3.g

Nurullah, A. S. (2012). Received and provided social support: A review of current evidence and future directions. *American Journal of Health Studies*, *27*(3), 173–188.

Nwoke, C. N., & Leung, B. M. Y. (2021). Historical antecedents and challenges of racialized immigrant women in access to healthcare services in Canada: An exploratory review of the literature. *Journal of Racial and Ethnic Health Disparities*, *8*(6), 1447–1455. https://doi.org/10.1007/s40615-020-00907-3

OASW (2009) *Swag social work in aging and gerontology*, *Ontario Association of Social Workers*. Available at: https://www.oasw.org/Public/Public/Awards_Folder/Inspirational_Leaders/SWAG_Social_Work_in_Aging_and_Gerontology.aspx

OCASI (2020). What are settlement services?. https://settlement.org/ontario/immigration-citizenship/landing-and-leaving/living-in-ontario/what-are-settlement-services/

Oda, A., Tuck, A., Agic, B., Hynie, M., Roche, B., & McKenzie, K. (2017). Health care needs and use of health care services among newly arrived syrian refugees: A cross-sectional study. *CMAJ Open*, *5*(2), E354-E358. https://doi.org/10.9778/cmajo.20160170

O'Donnell, P., Tierney, E., O'Carroll, A., Nurse, D., & MacFarlane, A. (2016). Exploring levers and barriers to accessing primary care for marginalized groups and identifying their priorities for primary care provision: A participatory learning and action research study. *International Journal for Equity in Health*, *15*(1), 197. https://doi.org/10.1186/s12939-016-0487-5

Ogbuagu, B. C. (2012). Nice CV! You will hear from us: Canadian labor market and the phenomenology of the marginalized ethnic professional migrant. *Journal of Social Sciences*, *8*(1), 1–12. https://doi.org/10.3844/jssp.2012.1.12

Okrainec, K., Booth, G. L., Hollands, S., & Bell, C. M. (2017). Language barriers among the foreign-born in Canada: Agreement of self-reported measures and persistence over time. *Journal of Immigrant and Minority Health*, *19*(1), 50–56. https://doi.org/10.1007/s10903-015-0279-9

Ontario Data Documentation, Extraction Service and Infrastructure. (2019). *Canadian community health survey, 2015/2016 annual component*. http://odesi2.scholarsportal.info.ezproxy.uwindsor.ca/webview/

Orpana, H. M., Lang, J. J., & Yurkowski, K. (2019). Validation d'une version réduite de l'échelle de provisions sociales au moyen de données d'enquêtes nationales Canadiennes [validation of a brief version of the social provisions scale using Canadian national survey data]. *Health Promotion and Chronic Disease Prevention in Canada*, *39*(12), 323–332. https://doi.org/10.24095/hpcdp.39.12.02

Osei, G. K., & Gorey, K. M. (2021). Preventive impacts of group homes in higher income neighborhoods: Retrospective cohort of youths in Ontario group home care, 2012 to 2016. *Child and Adolescent Social Work Journal*, *38*(6), 651–661. https://doi.org/10.1007/s10560-020-00691-3

Ottawa Public Health (2023). *Healthy babies, healthy children (HBHC) Ottawa Public Health*. https://www.ottawapublichealth.ca/en/public-health-services/healthy-babies--healthy-children--hbhc-.aspx

Pathways to Prosperity: Canada (2023). Local Immigration Partnerships, Réseaux en immigration francophone, and Place-based Initiatives. http://p2pcanada.ca/lip/

Peckham, A., Wiliams, A. P., Berta, W., & Denton, M. (2017). Caring for caregivers: Establishing resilience through social capital. *International Journal of Integrated Care*, *17*(3), 58. https://doi.org/10.5334/ijic.3170

Penning, M. J., & Zheng, C. (2016). Income inequities in health care utilization among adults aged 50 and older. *Canadian Journal on Aging = La Revue Canadienne Du Vieillissement*, *35*(1), 55–69. https://doi.org/10.1017/S0714980815000562

Pero, R. P. (2017). *The new local governance of immigration in Canada: Local immigration partnerships and their role in immigrant settlement and integration in small-and medium-sized Ontarian cities* (Doctoral dissertation, Queen's University (Canada).

Prus, S. G. (2011). Comparing social determinants of self-rated health across the United States and Canada. *Social science & medicine*, *73*(1), 50-59.

Putnam, R. D. (2000). *Bowling alone: The collapse and revival of American community*. Simon & Schuster.

Quan, H., Fong, A., de Coster, C., Wang, J., Musto, R., Noseworthy, T. W., & Ghali, W. A. (2006). Variation in health services utilization among ethnic populations. *Canadian Medical Association Journal*, *174*(6), 787–791. https://doi.org/10.1503/cmaj.050674

Quintana, S. M., Troyano, N., & Taylor, G. (2001). Cultural validity and inherent challenges in quantitative methods for multicultural research. In J. G. Ponterotto, J. M. Casas, L. A. Suzuki, & C. M. Alexander (Eds.), *Handbook of multicultural counseling* (pp. 604–630). Sage Publications, Inc.

Raghupathi, V., & Raghupathi, W. (2020). The influence of education on health: An empirical assessment of OECD countries for the period 1995-2015. *Archives of Public Health =*

Archives Belges De Sante Publique, *78*(1), 1–18. https://doi.org/10.1186/s13690-020-00402-5

Ramraj, C., Shahidi, F. V., Darity, W., Kawachi, I., Zuberi, D., & Siddiqi, A. (2016). Equally inequitable? A cross-national comparative study of racial health inequalities in the United States and Canada. *Social Science & Medicine 161*, 19–26. https://doi.org/10.1016/j.socscimed.2016.05.028

Raudi Krossinn,(2023) *Refugees and Immigrants* https://www.raudikrossinn.is/english/projects/domestic-projects/refugees-and-migrants/refugees-and-migrants/

Ravichandiran, N., Mathews, M., & Ryan, B. L. (2022). Utilization of healthcare by immigrants in Canada: A cross-sectional analysis of the Canadian community health survey. *BMC Primary Care*, *23*(1), 69. https://doi.org/10.1186/s12875-022-01682-2

Robles, T. F., Slatcher, R. B., Trombello, J. M., & McGinn, M. M. (2014). Marital quality and health: A meta-analytic review. *Psychological Bulletin, 140*(1), 140–187. https://doi.org/10.1037/a0031859

Rosenman, R., Tennekoon, V., & Hill, L. G. (2011). Measuring bias in self-reported data. *International Journal of Behavioural & Healthcare Research*, *2*(4), 320–332. https://doi.org/10.1504/IJBHR.2011.043414

Ross, H., Buchy, M., & Proctor, W. (2002). Laying down the ladder: A typology of public participation in Australian natural resource management. *Australasian Journal of Environmental Management*, *9*(4), 205–217. https://doi.org/10.1080/14486563.2002.10648561

Saleem, A., Steadman, K. J., & Fejzic, J. (2019). Utilisation of healthcare services and medicines by pakistani migrants residing in high income countries: A systematic review and thematic synthesis. *Journal of Immigrant and Minority Health*, *21*(5), 1157–1180. https://doi.org/10.1007/s10903-018-0840-4

Samek, D., Laporte, A., Nauenberg, E., Shen, L., & Coyte, P. (2012). The effect of social capital on the use of general practitioners: A comparison of immigrants and non-immigrants in Ontario. *Healthcare Policy*, *8*(1), 49–66. https://doi.org/10.12927/hcpol.2012.23022

Samuelson-Kiraly, C., Montague, T., Nemis-White, J., MacPherson, N., Martin, L., Aylen, J., Gogovor, A., & Mitchell, J. I. (2020). Access and quality of health care in Canada: Insights from 1998 to the present. *Healthcare Management Forum*, *33*(6), 253–258. https://doi.org/10.1177/0840470420934521

Sarason, B. R., Sarason, I. G., & Pierce, G. R. (1990). *Social support: An interactional view*. John Wiley & Sons.

Schnittker, J., & Bacak, V. (2014). The increasing predictive validity of self-rated health. *PloS One*, *9*(1), e84933. https://doi.org/10.1371/journal.pone.0084933

Schoueri-Mychasiw, N., Campbell, S., & Mai, V. (2013). Increasing screening mammography among immigrant and minority women in Canada: A review of past interventions. *Journal of Immigrant and Minority Health*, *15*(1), 149–158. https://doi.org/10.1007/s10903-012-9612-8

Schumann, M., Bug, M., Kajikhina, K., Koschollek, C., Bartig, S., Lampert, T., & Santos-Hövener, C. (2020). The concept of acculturation in epidemiological research among migrant populations: A systematic review. *SSM - Population Health*, *10*, 100539. https://doi.org/10.1016/j.ssmph.2020.100539

Schunk, D. H., & DiBenedetto, M. K. (2020). Motivation and social cognitive theory. *Contemporary Educational Psychology*, *60*, 101832. https://doi.org/10.1016/j.cedpsych.2019.101832

Services, A. H. (2023). *Our people strategy.* Alberta Health Services. https://www.albertahealthservices.ca/about/page13140.aspx

Setia, M. S., Lynch, J., Abrahamowicz, M., Tousignant, P., & Quesnel-Vallee, A. (2011). Self-rated health in Canadian immigrants: Analysis of the longitudinal survey of immigrants to Canada. *Health & Place*, *17*(2), 658–670. https://doi.org/10.1016/j.healthplace.2011.01.006

Shields, J., Preston, V., Richmond, T., Sorano, Y., Gasse-Gates, E., Douglas, D., Campey, J., & Johnston, L. (2015). Knowledge mobilization/transfer and immigration policy: Forging space for NGOs—the case of CERIS—The Ontario metropolis centre. *Journal of International Migration and Integration*, *16*(2), 265–278. https://doi.org/10.1007/s12134-015-0425-1

Shields, M., & Shooshtari, S. (2001). Determinants of self-perceived health. *Health Rep*, *13*(1), 35–52.

Shiell, A., Hawe, P., & Kavanagh, S. (2020). Evidence suggests a need to rethink social capital and social capital interventions. *Social Science & Medicine*, *257*, 111930. https://doi.org/10.1016/j.socscimed.2018.09.006

Shim, J. K. (2010). Cultural health capital: A theoretical approach to understanding health care interactions and the dynamics of unequal treatment. *Journal of Health and Social Behavior*, *51*(1), 1–15. https://doi.org/10.1177/0022146509361185

Siddiqi, A. A., Wang, S., Quinn, K., Nguyen, Q. C., & Christy, A. D. (2016). Racial disparities in access to care under conditions of universal coverage. *American Journal of Preventive Medicine*, *50*(2), 220–225. https://doi.org/10.1016/j.amepre.2014.08.004

Siddiqi, A., & Hertzman, C. (2007). Towards an epidemiological understanding of the effects of long-term institutional changes on population health: A case study of Canada versus the USA. *Social Science & Medicine*, *64*(3), 589–603. https://doi.org/10.1016/j.socscimed.2006.09.034

Simich, L., Beiser, M., & Mawani, F. N. (2003). Social support and the significance of shared experience in refugee migration and resettlement. *Western Journal of Nursing Research*, *25*(7), 872–891. https://doi.org/10.1177/0193945903256705

Simich, L., Beiser, M., Stewart, M., & Mwakarimba, E. (2005). Providing social support for immigrants and refugees in Canada: Challenges and directions. *Journal of Immigrant Health*, *7*(4), 259–268. https://doi.org/10.1007/s10903-005-5123-1

Spencer, K. L., & Grace, M. (2016). Social foundations of health care inequality and treatment bias. *Annual Review of Sociology*, *42*(1), 101–120. https://doi.org/10.1146/annurev-soc-081715-074226

Starfield, B. (1998). *Primary care: Balancing health needs, services, and technology*. Religion in America.

Starfield, B. (2008). Primary care in Canada: Coming or going? *Healthcare Papers*, *8*(2), 58-62; discussion 64-7. https://doi.org/10.12927/hcpap.2008.19711

Starfield, B., Shi, L., & Macinko, J. (2005). Contribution of primary care to health systems and health. *The Milbank Quarterly*, *83*(3), 457–502. https://doi.org/10.1111/j.1468-0009.2005.00409.x

Statistics Canada. (2014). *Immigration and ethnocultural diversity in Canada.* http://www12.statcan.gc.ca/nhs-enm/2011/as-sa/99-010-x/99-010-x2011001-eng.cfm

Statistics Canada. (2016). *Canadian Community Health Survey—annual component, 2016.* http://www.statcan.gc.ca/eng/survey/household/3226

Statistics Canada. (2017a). *Age categories, life cycle groupings.* https://www.statcan.gc.ca/en/concepts/definitions/age2

Statistics Canada. (2017b). *Canadian Community Health Survey—Annual component, 2017.* https://www23.statcan.gc.ca/imdb/p2SV.pl?Function=getSurvey&Id=329241

Statistics Canada. (2017c). *Table 2 Top 10 countries of birth of recent immigrants, Canada, 2016.* https://www150.statcan.gc.ca/n1/daily-quotidien/171025/t002b-eng.htm

Statistics Canada. (2018). *Surveys and statistical programs – Canadian Community Health Survey – Annual Component.* https://www23.statcan.gc.ca/imdb/p2SV.pl?Function=getSurvey&Id=795204

Statistics Canada. (2019). *Census Profile, 2016 Census.* https://www12.statcan.gc.ca/census-recensement/2016/dppd/prof/details/page.cfm?Lang=E&Geo1=PR&Code1=01&Geo2=PR&Code2=01&Data=Count&SearchText=Canada&SearchType=Begins&SearchPR=01&B1=Ethnic+origin&TABID=1

Statistics Canada. (2020). *Canadian Community Health Survey-Annual Component 2020.* https://www23.statcan.gc.ca/imdb/p2SV.pl?Function=getSurvey& SDDS=3226s

Statistics Canada. (2022a). *Immigrants make up the largest share of the population in over 150 years and continue to shape who we are as Canadians.* https://www150.statcan.gc.ca/n1/daily-quotidien/221026/dq221026a-eng.htm

Statistics Canada. (2022b). *Immigrant status*. https://census.gc.ca/census-recensement/2021/ref/dict/az/Definition-eng.cfm?ID=pop148

Stewart, M. J., Makwarimba, E., Beiser, M., Neufeld, A., Simich, L., & Spitzer, D. (2010). Support and health: Immigrants' and refugees' perspectives. *Diversity in Health & Care*, *7*(2), 1–19.

Stewart, M., Anderson, J., Beiser, M., Mwakarimba, E., Neufeld, A., Simich, L., & Spitzer, D. (2008). Multicultural meanings of social support among immigrants and refugees. *International Migration*, *46*(3), 123–159. https://doi.org/10.1111/j.1468-2435.2008.00464.x

Swiss Info (2016)*Grassroots projects bring local immigrants together.* https://www.swissinfo.ch/eng/society/part-of-society_grassroots-projects-bring-locals-and-immigrants-together/42596288

Szreter, S., & Woolcock, M. (2004). Health by association? Social capital, social theory, and the political economy of public health. *International Journal of Epidemiology*, *33*(4), 650–667. https://doi.org/10.1093/ije/dyh013

Tay, L., Tan, K., Diener, E., & Gonzalez, E. (2013). Social relations, health behaviors, and health outcomes: A survey and synthesis. *Applied Psychology. Health and Well-Being*, *5*(1), 28–78. https://doi.org/10.1111/aphw.12000

Taylor, L. A., Tan, A. X., Coyle, C. E., Ndumele, C., Rogan, E., Canavan, M., ... & Bradley, E. H. (2016). Leveraging the social determinants of health: what works?. *PloS one*, *11*(8), e0160217. https://doi.org/10.1371/journal.pone.0160217

Taylor, S. E. (2011). Social support: A review. In H. S. Friedman (Ed.), *The Oxford handbook of health psychology* (pp. 189–214). Oxford University Press.

Teruya, S. A., & Bazargan-Hejazi, S. (2013). The immigrant and hispanic paradoxes: A systematic review of their predictions and effects. *Hispanic Journal of Behavioral Sciences*, *35*(4), 486–509. https://doi.org/10.1177/0739986313499004

Thoits, P. A. (2011). Mechanisms linking social ties and support to physical and mental health. *Journal of Health and Social Behavior*, *52*(2), 145–161. https://doi.org/10.1177/0022146510395592

Thomas, C. Y. (1996). Capital markets, financial markets and social capital. *Social and Economic studies*, *45*(2-3), 1–23.

Turin, T. C., Haque, S., Chowdhury, N., Yeasmin, F., Ferdous, M., Rashid, R., ... & Chowdhury, M. (2021). Community-Driven prioritization of primary health care access issues by Bangladeshi-Canadians to guide program of research and practice. *Family & Community Health*, *44*(4), 292-298. *DOI:* 10.1097/FCH.0000000000000308

Turner, R. J., & Marino, F. (1994). Social support and social structure: A descriptive epidemiology. *Journal of Health and Social Behavior*, *35*(3), 193. https://doi.org/10.2307/2137276

Uchino, B. N. (2009). Understanding the links between social support and physical health: A life-span perspective with emphasis on the separability of perceived and received support. *Perspectives on Psychological Science*, *4*(3), 236–255. https://doi.org/10.1111/j.1745-6924.2009.01122.x

Umberson, D., Lin, Z., & Cha, H. (2022). Gender and social isolation across the life course. *Journal of Health and Social Behavior*, *63*(3), 319–335. https://doi.org/10.1177/00221465221109634

Umberson, D., Williams, K., Powers, D. A., Liu, H., & Needham, B. (2006). You make me sick: Marital quality and health over the life course. *Journal of Health and Social Behavior*, *47*(1), 1–16. https://doi.org/10.1177/002214650604700101

United Nations Refugee Agency. (2022). *Canada: Frequently asked questions*. https://www.unhcr.ca/about-us/frequently-asked-questions/#:~:text=A%20refugee%20is%20someone%20who,persecution%2C%20war%2C%20or%20violence .

van Hear, N., Bakewell, O., & Long, K. (2018). Push-pull plus: Reconsidering the drivers of migration. *Journal of Ethnic and Migration Studies*, *44*(6), 927–944 https://doi.org/10.1080/1369183X.2017.1384135

Vang, Z. M., Sigouin, J., Flenon, A., & Gagnon, A. (2017). Are immigrants healthier than native-born Canadians? A systematic review of the healthy immigrant effect in Canada. *Ethnicity & Health*, *22*(3), 209–241. https://doi.org/10.1080/13557858.2016.1246518

Vang, Z., Sigouin, J., Flenon, A., & Gagnon, A. (2015). The healthy immigrant effect in Canada: A systematic review. *Population Change and Lifecourse Strategic Knowledge Cluster Discussion Paper Series/ Un Réseau Stratégique De Connaissances Changements De Population Et Parcours De Vie Document De Travail*, *3*(1), 4. https://ir.lib.uwo.ca/pclc/vol3/iss1/4

Veenstra, G., & Vanzella-Yang, A. (2021). Does household income mediate the association between education and health in Canada? *Scandinavian Journal of Public Health*, *49*(8), 857–864. https://doi.org/10.1177/1403494820917534

Venkatesh, S. A. (1997). The social organization of street gang activity in an urban ghetto. *American Journal of Sociology*, *103*(1), 82–111. https://doi.org/10.1086/231172

Villalonga-Olives, E., Wind, T. R., & Kawachi, I. (2018). Social capital interventions in public health: A systematic review. *Social Science & Medicine*, *212*, 203–218. https://doi.org/10.1016/j.socscimed.2018.07.022

Vineberg, R. (2015). Healthy enough to get in: The evolution of Canadian immigration policy related to immigrant health. *Journal of International Migration and Integration*, *16*(2), 279–297. https://doi.org/10.1007/s12134-014-0339-3

Vittinghoff, E., Glidden, D. V., Shiboski, S. C., & McCulloch, C. E. (2012). *Regression methods in biostatistics: Linear, logistic, survival, and repeated measures models*. Springer US. https://doi.org/10.1007/978-1-4614-1353-0

Warmington, R., & Lin, D. (2014). Healthcare is political: Case example of physician advocacy in response to the cuts to refugees' and claimants' healthcare coverage under the interim federal health program. *University of Ottawa Journal of Medicine*, *4*(1). https://doi.org/10.18192/uojm.v4i1.1040

Weiss, R. (1974). The provision of social relations. In Z. Rubin (Ed.), *Doing onto Others* (pp. 17–26). Prentice Hall.

Whitehead, M., & Diderichsen, F. (2001). Social capital and health: Tip-toeing through the minefield of evidence. *Lancet (London, England)*, *358*(9277), 165–166. https://doi.org/10.1016/S0140-6736(01)05398-3

Wildemuth, B. M. (2009). *Frequencies, cross-tabulation, and the chi-square statistic. Applications of social research methods to questions in information and library science*. Libraries Unlimited Press.

Winter, E. (2015). Rethinking multiculturalism after its "retreat". *American Behavioral Scientist, 59*(6), 637–657. https://doi.org/10.1177/0002764214566495

Wu, Z., Penning, M. J., & Schimmele, C. M. (2005). Immigrant status and unmet health care needs. *Canadian Journal of Public Health*, *96*(5), 369–373. https://doi.org/10.1007/BF03404035

Yang, P. Q., & Hwang, S. H. (2016). Explaining immigrant health service utilization. *SAGE Open*, *6*(2), 215824401664813. https://doi.org/10.1177/2158244016648137

Yung, S. (2022). Immigrant status and unmet home care needs: Results from the Canadian community health survey. *Journal of Immigrant and Minority Health*, *24*(1), 154–161. https://doi.org/10.1007/s10903-020-01135-x

Zajacova, A., & Lawrence, E. M. (2018). The relationship between education and health: reducing disparities through a contextual approach. *Annual review of public health*, *39*, 273-28

Zajacova, A., & Siddiqi, A. (2022). A comparison of health and socioeconomic gradients in health between the United States and Canada. *Social Science & Medicine (1982)*, *306*, 115099. https://doi.org/10.1016/j.socscimed.2022.115099

APPENDICES

Appendix A: Regressions with Imputed Missing Data

Table 9I Predictors of Having a Regular Health Care Provider: Logistic Regression Models (*N* = 3,977)

Predictors Categories	Model 1 to 12 OR	95% CI	Model 13 OR	95% CI	Model 14 OR	95% CI
Social Provisions Scale						
Low	1.00	…	1.00	…		
Medium	1.29	1.00, 1.67	1.42	1.08, 1.86		
High	1.13	0.87, 1.46	1.32	1.00, 1.76		
Length of Time Since Immigration						
10 or more years	1.00	…	1.00	…		
Less than 10 years	0.48	0.41, 0.57	0.57	0.47, 0.69		
Age						
18 to 24	1.00	…	1.00	…	1.00	…
25 to 44	1.68	1.27, 2.22	1.36	0.98, 1.90	1.42	1.02, 1.99
45 to 64	3.33	2.50, 4.85	2.53	1.75, 3.64	2.89	2.00, 4.16
Health Status						
Excellent	1.00	…	1.00	…	1.00	…
Very good	1.26	1.04, 1.53	1.17	0.95, 1.43	1.16	0.94, 1.42
Good	1.72	1.39, 2.12	1.49	1.18, 1.86	1.45	1.15, 1.82
Fair or poor	2.57	1.80, 3.69	2.31	1.57, 3.41	2.13	1.45, 3.13
Sex						
Male	1.00	…	1.00	…	1.00	…
Female	1.56	1.33, 1.83	1.65	1.39, 1.95	1.70	1.44, 2.01
Race						
White	1.00	…	1.00	…	1.00	…
Non-white	0.99	0.83, 1.18	1.07	0.87, 1.30	1.02	0.84, 1.25
Educational Attainment						
Any postsecondary	1.00	…	1.00	…	1.00	…
High school graduate	1.21	0.93, 1.57	1.31	0.99, 1.75	1.39	1.04, 1.85
Less than high school	1.39	0.85, 2.28	1.39	0.82, 2.37	1.28	0.75, 2.17

Annual Household Income						
$80,000 or more	1.00	…	1.00	…	1.00	…
$60,000 to $79,999	0.74	0.58, 0.94	0.80	0.63, 1.03	0.80	0.62, 1.03
$40,000 to $59,999	0.80	0.63, 1.02	0.84	0.65, 1.08	0.82	0.64, 1.06
Less than $40,000	0.61	0.50, 0.74	0.68	0.54, 0.85	0.64	0.51, 0.81
Language Spoken at Home						
English or French	1.00	…	1.00	…	1.00	…
Neither English or French	1.21	1.02, 1.44	1.29	1.06, 1.56	1.26	1.04, 1.52
Marital Status						
Married or common law	1.00	…	1.00	…	1.00	…
Not married or common law	0.55	0.47, 0.65	0.74	0.58, 0.93	0.77	0.61, 0.98
Household Size						
Lives with two or more	1.00	…	1.00	…	1.00	
Lives with one other	0.80	0.66, 0.96	0.66	0.54, 0.81	0.66	0.54, 0.82
Lives alone	0.55	0.46, 0.67	0.61	0.46, 0.80	0.57	0.44, 0.75
Province						
PEI & NFLD	1.00	…	1.00	…	1.00	…
Alberta	3.61	2.36, 5.52	3.28	2.08, 5.18	3.16	1.96, 5.10
British Columbia	2.83	1.86, 4.30	2.40	1.53, 3.76	2.36	1.47, 3.78
Social Provisions Scale by Length of Time Since Immigration						$p < .001$

Notes. CI, confidence interval; OR, odds ratio; NFLD. Newfoundland and Labrador; PEI, Prince Edward Island. An odds ratio of 1.0 is the baseline. Model 13: Hosmer and Lemeshow goodness-of-fit test 5th iteration) χ^2 (8) = 2.34, p = .97. Model 14: Hosmer and Lemeshow goodness-of-fit test χ^2 (8) = 9.57, p = .30.

Table 10I Depiction of the Social Support by Time In Country Interaction on Having a Regular Health Care Provider

	High Social Support-Regular Health Care Provider Association		
Time Since Immigration	Sample Size	Odds Ratio	95% Confidence Interval
10 or more years	2,614	1.36	0.96, 1.92
Less than 10 years	1,363	1.56	1.02, 2.39

Note. Odds ratios were adjusted for all other predictors.

Table 11I Predictors of Having a Place to go for a Minor Health Problem: Logistic Regression Models

Predictors	Model 1 to 12		Model 13	
Categories	OR	95% CI	OR	95% CI
Social Provisions Scale				
Low	1.00	…	1.00	…
Medium	1.74	1.28, 2.37	1.86	1.34, 2.59
High	1.79	1.31, 2.44	2.01	1.43, 2.83
Length of Time Since Immigration				
10 or more years	1.00	…	1.00	…
Less than 10 years	0.59	0.47, 0.73	0.70	0.55, 0.90
Age				
18 to 24	1.00	…	1.00	…
25 to 44	1.93	1.37, 2.71	1.76	1.17, 2.65
45 to 64	3.08	2.16, 4.40	2.83	1.79, 4.48
Health Status				
Excellent	1.00	…	1.00	…
Very good	1.37	1.05, 1.80	1.35	1.03, 1.78
Good	1.23	0.94, 1.62	1.20	0.89, 1.60
Fair or poor	2.57	1.54, 4.29	2.81	1.63, 4.85
Sex				
Male	1.00	…	1.00	…
Female	1.63	1.32, 2.02	1.65	1.32, 2.06
Race				
White	1.00	…	1.00	…
Non-white	0.92	0.73, 1.16	1.06	0.81, 1.38
Educational Attainment				
Any postsecondary	1.00	…	1.00	…
High school graduate	1.09	0.74, 1.46	1.18	0.82, 1.69
Less than high school	0.91	0.51, 1.63	1.02	0.55, 1.90

Annual Household Income				
$80,000 or more	1.00	…	1.00	…
$60,000 to $79,999	0.72	0.53, 1.00	0.78	0.56, 1.08
$40,000 to $59,999	0.99	0.70, 1.40	1.06	0.74, 1.52
Less than $40,000	0.55	0.43, 0.72	0.67	0.50, 0.90
Language Spoken at Home				
English or French	1.00	…	1.00	…
Neither English or French	0.95	0.76, 1.19	1.04	0.81, 1.34
Marital Status				
Married or common law	1.00	…	1.00	…
Not married or common law	0.61	0.50, 0.76	0.89	0.65, 1.21
Household Size				
Lives with two or more	1.00	…	1.00	…
Lives with one other	0.81	0.63, 1.05	0.68	0.52, 0.90
Lives alone	0.62	0.48, 0.80	0.68	0.48, 0.97
Province				
PEI & NFLD	1.00	…	1.00	…
Alberta	3.21	1.90, 5.42	2.83	1.63, 4.91
British Columbia	2.12	1.33, 3.69	1.88	1.09, 3.22

Notes. CI, confidence interval; NFLD, Newfoundland and Labrador; OR, odds ratio; PEI, Prince Edward Island.

An odds ratio of 1.00 is the baseline. Model 13: Hosmer and Lemeshow goodness-of-fit test χ^2 (8) = 15.35, p = .053.

Table 12I Predictors of Having Unmet Health Care Needs: Logistic Regression Models

Predictors	Model 1 to 11		Model 12	
Categories	OR	95% CI	OR	95%
Social Provisions Scale				
Low	1.00	…	1.00	…
Medium	0.41	0.22, 0.74	0.52	0.27, 0.98
High	0.45	0.25, 0.81	0.59	0.31, 1.13
Length of Time Since Immigration				
10 or more years	1.00	…	1.00	…
Less than 10 years	1.15	0.72, 1.83	1.24	0.73, 2.09
Age				
18 to 24	1.00	…	1.00	…
25 to 44	0.99	0.42, 2.36	0.86	0.32, 2.35
45 to 64	0.75	0.31, 1.80	0.55	0.18, 1.63
Health Status				
Excellent	1.00	…	1.00	…
Very good	1.07	0.54, 2.11	1.10	0.55, 2.18
Good	1.38	0.70, 2.71	1.53	0.77, 3.07
Fair or poor	4.41	2.22, 8.76	4.98	2.35, 10.56
Sex				
Male	1.00	…	1.00	…
Female	0.95	0.61, 1.50	0.94	0.60, 1.48
Race				
White	1.00	…	1.00	…
Non-white	0.96	0.59, 1.55	0.89	0.52, 1.52
Educational Attainment				
Any postsecondary	1.00	…	1.00	…
High school graduate	0.91	0.43, 1.96	0.84	0.38, 1.86
Less than high school	0.76	0.18, 3.16	0.61	0.14, 2.63
Annual Household Income				
$80,000 or more	1.00	…	1.00	…
$60,000 to $79,999	0.98	0.49, 1.99	0.97	0.47, 2.00
$40,000 to $59,999	1.04	0.53, 2.05	1.00	0.49, 2.00
Less than $40,000	1.25	0.71, 2.20	1.10	0.58, 2.05

Language Spoken at Home				
English or French	1.00	…	1.00	…
Neither English or French	0.62	0.37, 1.03	0.56	0.32, 0.97
Marital Status				
Married or common law	1.00	…	1.00	…
Not married or common law	1.11	0.69, 1.77	0.94	0.47, 1.86
Household Size				
Lives with two or more	1.00	…	1.00	…
Lives with one other	0.78	0.45, 1.36	0.77	0.43, 1.38
Lives alone	1.00	0.56, 1.74	0.90	0.41, 1.97

Notes. CI, confidence interval; OR, odds ratio; NFLD. Newfoundland and Labrador; PEI, Prince Edward Island. An odds ratio of 1.00 is the baseline. Model 12: Hosmer and Lemeshow goodness-of-fit test χ^2 (8) = 8.47, p = .39.

Table 13I Predictors of Having Unmet Health Care Needs: Logistic Regression Models

Predictors Categories	Model 1 to 4 OR	95% CI	Model 5 OR	95%	Model 6 OR	95% CI
Social Provisions Scale						
Low	1.00	…	1.00	…	1.00	…
Medium	0.41	0.22, 0.74	0.52	0.28, 0.98	0.39	0.21, 0.7
High	0.45	0.25, 0.81	0.61	0.32, 1.14	0.41	0.23, 0.74
Length of Time Since Immigration						
10 or more years	1.00	…	1.00	…	1.00	…
Less than 10 years	1.15	0.72, 1.83	1.52	0.94, 2.46	1.30	0.81, 2.07
Health Status						
Excellent	1.00	…	1.00	…		
Very good	1.07	0.54, 2.11	1.10	0.55, 2.17		
Good	1.38	0.70, 2.71	1.46	0.73, 2.92		
Fair or poor	4.41	2.22, 8.76	4.36	2.09, 9.10		
Language Spoken at Home						
English or French	1.00	…	1.00	…	1.00	…
Neither English or French	0.62	0.37, 1.03	0.55	0.32, 0.93	0.56	0.33, 0.95

Notes. CI, confidence interval; OR, odds ratio; NFLD. Newfoundland and Labrador; PEI, Prince Edward Island. An odds ratio of 1.00
is the baseline. Model 5: Hosmer and Lemeshow goodness-of-fit test χ^2 (8) = 6.73, p = .57.
Model 6: Hosmer and Lemeshow goodness-of-fit test χ^2 (6) = 8.54, p = .20

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