This study was conducted for Canada Mortgage and Housing Corporation (CMHC) under Part IX of the *National Housing Act.* The analysis, interpretations and recommendations are those of the consultant and do not necessarily reflect the views of CMHC.

La présente étude a été réalisée pour la Société canadienne d'hypothèques et de logement (SCHL) en vertu de la partie IX de la *Loi nationale sur l'habitatio*n. Les analyses, interprétations et recommandations présentées sont celles du consultant et ne reflètent pas nécessairement le point de vue de la SCHL.

CMHC will have the document translated upon request.

To get a translation of this document, please email **Housing_Knowledge_Centre@cmhc.ca** or complete the portion below and return it to the following address:

Housing Knowledge Centre
Canada Mortgage and Housing Corporation
700 Montreal Road
Ottawa, Ontario K1A 0P7

La SCHL fera traduire le document sur demande.

Pour recevoir une copie traduite de ce document, veuillez envoyer un courriel au **centre_du_savoir_logement@schl.ca** ou remplir la partie ci-dessous et la retourner à l'adresse suivante :

Centre du savoir sur le logement
Société canadienne d'hypothèques et de logement
700, chemin Montréal
Ottawa (Ontario) K1A 0P7

Report title • Titre du rapport

Name • Nom

***Telephone number • N° de téléphone**

***Email address • Courriel**

Mandatory/Obligatoire

Address • Adresse

Street • rue

Apt. • app.

City • ville

Province • province

Postal code • code postal

OPIMS

(For internal use only/Section réservée à l'usage interne)

20201203-002

Phase 2: Data Analysis Project

Housing Needs and Challenges for Rural and Urban (Off-Reserve) Indigenous Peoples

December 3, 2021

Acknowledgement

Table of Contents

4

Executive Summary

The Congress of Aboriginal Peoples (CAP) is the national voice of off-reserve status and non-status Indians, Métis, and Southern Inuit Aboriginal Peoples. CAP, which represents the interests of its provincial and territorial affiliate organizations, is one of the five National Indigenous[1] (representative) Organizations recognized by the Government of Canada.

CAP has been a long-standing advocate for the provision of safe, affordable, and accessible housing for Indigenous people living off-reserve, and has undertaken or participated in a range of engagements, projects, federal task forces, working groups, and symposiums that have put forward policy and program recommendations to that effect.

In May 2020, CAP completed a literature review to identify the relationships, correlations, and possible causations between housing and four socio-economic outcomes: education, health, the labour market, and Indigenous languages. This literature review was understood as Phase 1 of a broader research project. This report constitutes Phase 2 of this broader research project, a data analysis project to build on the literature review findings. The literature review found there are very few statistically sophisticated academic studies in an off-reserve Indigenous context. This project focuses on advancing foundational knowledge and an understanding of these relationships.

The objective of Phase 2 is to determine whether, and to what degree, off-reserve housing and housing conditions influence an individual's outcomes in education, health, the labour market, and Indigenous languages.[2] In turn, this data analysis contributes to the field of off-reserve Indigenous housing research, and enables CAP to continue advocating on behalf of its constituents for improved off-reserve housing conditions.

We find that housing and housing conditions are significant explanatory variables related to outcomes in education, health, the labour market, and Indigenous languages.

Specifically, we find significant relationships between several dwelling and household characteristics and perceived general health, food security, school attendance, school completion, labour force participation, full-time employment, and Indigenous children's use of Indigenous languages at home. School attendance and completion, labour force participation, and the likelihood of full-time work all differ systematically between Indigenous and non-Indigenous people, both as a whole and in terms of dwelling and household factors.

Among Indigenous people, perceived general health is substantially better for homeowners, and those with affordable housing and adequate housing. The type of dwelling is also associated with greater levels of perceived general health, with Indigenous individuals in detached homes and apartments more likely to

---

[1] The term Indigenous is used primarily throughout this report and refers widely to the original peoples of North America and their descendants. Where Aboriginal is used, it refers specifically to the constituency represented by CAP and reflects the term as used in the Constitution of Canada. It will be used throughout this report in these capacities, as well as to reflect terminology used in federal documents and data products, like the Canadian Census of Population.

[2] "Off-reserve" in this context refers to the parts of Canada lying outside of the geographic areas of First Nation reserves. This qualifier is not intended to encapsulate the experience of Inuit people residing outside of their home communities or hamlets, nor is it intended to encapsulate the experience of Métis people residing outside of their home communities or settlements.

5

have greater perceived general health than those who live in other types of dwellings. Increased housing security is strongly associated with increased food security. Food security is also positively associated with housing adequacy, suitability, and affordability.

For both Indigenous and non-Indigenous youth, homeownership, housing suitability, and increased household income all increase the likelihood of attending school. Increased household income also improves the likelihood of school completion for both Indigenous and non-Indigenous youth. Conversely, youth in multigenerational households are less likely to attend school than youth who do not reside in multigenerational households. These effects are stronger for Indigenous youth than for non-Indigenous youth.

As housing security increases, from subsidized rentals to non-subsidized rentals to owned dwelling, so too does the likelihood of Indigenous youth completing school. Higher levels of educational attainment for the primary household maintainer predict higher rates of school attendance and school completion for Indigenous youth.

For Indigenous people, more secure forms of housing tenure lead to a greater likelihood of participating in the labour force and to a greater likelihood of having full-time employment. Additionally, there is a positive relationship between adequate and affordable housing and full-time employment for Indigenous people.

Household size and structure have a large impact on the labour force participation of both Indigenous and non-Indigenous people. Specifically, larger households and more youths in the household are associated with lower labour force participation. The effects of household size and structure on labour force participation are about the same for Indigenous people as they are for non-Indigenous people.

Indigenous children in households with younger primary household maintainers are more likely to speak an Indigenous language at home than Indigenous children in households with older primary household maintainers. The likelihood of speaking an Indigenous language regularly at home is negatively correlated with household tenure: Indigenous children in subsidized rentals are most likely to speak an Indigenous language regularly at home, followed by those in non-subsidized dwellings and then those in owned dwellings.

1.0 Introduction and Background

The Congress of Aboriginal Peoples (CAP) is the national voice of off-reserve status and non-status Indians, Métis, and Southern Inuit Aboriginal Peoples. CAP, which represents the interests of its provincial and territorial affiliate organizations, is one of the five National Indigenous[3] (representative) Organizations recognized by the Government of Canada.

CAP has been a long-standing advocate for the provision of safe, affordable, and accessible housing for Indigenous people living off-reserve, and has undertaken or participated in a range of engagements, projects, federal task forces, working groups, and symposiums that have put forward policy and program recommendations to that effect.

In September 2018, a resolution passed at CAP's Annual General Assembly (AGA Resolution #6 2018) titled "Off-reserve housing" called for data collection and analysis pertaining to the off-reserve housing needs of Indigenous people at the provincial and territorial level (termed "unique housing dilemma or plight"), as well as continued advocacy with the federal government.

Additionally, CAP's Political Accord with Canada, signed in December 2018 (Political Accord 2018), notes the joint objective of "clos[ing] the socio-economic gap between Indigenous peoples and non-Indigenous Canadians," and the joint policy priority of "research … to help determine needs … and gaps ... in such areas as housing, education, health, language and culture."

In May 2020, CAP completed a literature review to identify the relationships, correlations, and possible causations between housing and four socio-economic outcomes: education, health, the labour market, and Indigenous languages. This literature review was understood as Phase 1 of a broader research project. This report constitutes Phase 2 of this broader research project, a data analysis project to build on the literature review findings. The literature review found there are very few statistically sophisticated academic studies in an off-reserve Indigenous context, however, so this project focuses on advancing foundational knowledge and understanding of these relationships.

Collectively, the literature indicates that the relationships between housing and education, health, and the labour market (particularly labour force participation) are generally well understood in a non-Indigenous context. Improvements in housing suitability, crowding, adequacy, affordability, and tenure have been linked to either direct or indirect positive impacts on academic achievement, physical and mental health, and employment outcomes. The literature shows, however, that more study is warranted to identify how these factors interact for off-reserve Indigenous people. Additionally, the literature review suggests that little is known about the relationship between housing and Indigenous Languages, especially in the off-reserve Indigenous context in Canada.

In response to these Phase 1 findings, the objective of Phase 2 is to explore if and to what extent the relationships, correlations, and possible causations between housing and the four socio-economic outcome

---

[3] The term Indigenous is used primarily throughout this report and refers widely to the original peoples of North America and their descendants. Where Aboriginal is used, it refers specifically to the constituency represented by CAP and reflects the term as used in the Constitution of Canada. It will be used throughout this report in these capacities, as well as to reflect terminology used in federal documents and data products, like the Canadian Census of Population.

areas identified in Phase 1 can be tested for validity in the off-reserve Indigenous context using large Canadian datasets like the Census of Population (Census) and the Aboriginal Peoples Survey (APS).

The objective of Phase 2 is to determine whether, and to what degree off-reserve housing and housing conditions influence an individual's outcomes in education, health, the labour market, and Indigenous languages. In turn, this data analysis contributes to the field of off-reserve Indigenous housing research, and enables CAP to continue advocating on behalf of its constituents for improved off-reserve housing conditions.

Note, however, that the Phase 1 findings laid out a broad research agenda to fill the gaps in Indigenous housing research. This Phase 2 study only approaches some of the possible research directions suggested by the Phase 1 literature review.

The discussion of the results focuses on Indigenous, dwelling, and household characteristics, even though the analysis includes other socio-demographic, human capital, and labour market characteristics with the model specifications. As a result, there is little emphasis on the effects of marital status, human capital, and labour market characteristics, even though they are included in our models and are likely to be highly influential on the outcomes of interest.

This approach is intended to highlight these factors as little research has been conducted on the effects of dwelling and household characteristics on several of our outcomes of interest within the Indigenous context. For instance, the literature is quite sparse in terms of the impact of tenure, adequacy, suitability, affordability, and household composition on full-time work status, job satisfaction, and (Indigenous) language usage.

The focus here is on cross-sectional data (i.e., data on individuals at a point in time). It is important to note that cross-sectional analysis, such as this, may only be able to capture short run effects of dwelling and household characteristics. Longitudinal data may be required to understand long run effects.

This report proceeds in the following way. Section 2 covers trends of our outcomes of interest, as well as some basic demographic information of Indigenous and non-Indigenous people from 2006 to 2016. Section 3 presents in-depth multivariate analyses of four health outcomes: perceived general health, perceived mental health, food security, and sense of belonging to one's community. Section 4 covers similar analyses of school attendance and secondary school completion. Section 5 presents analyses on labour outcomes, including labour force participation, full-time work status, and overall job satisfaction. Section 6 shows an analysis of regular Indigenous language usage at home. Section 7 provides direction for future research. Section 8 provides recommendations for next steps.

Each section includes results from a collection of multivariate logistic regression models, supported by an in-depth explanation of the most pertinent effects, as well as any other effects in our control variables that were of special interest. The results are discussed in terms of odds ratios.

The report also includes three appendices. The first provides definitions for key terms. The second provides definitions for each of the outcome variables. The last provides definitions for demographic, Indigenous, dwelling, household, human capital, and labour characteristic variables. Variables are referenced in italics (e.g., *Adequate Housing*).

2.0 Trend Analysis

This section of the report presents some descriptive statistics that justify the study of socioeconomic outcomes related to housing conditions for Indigenous peoples separate from non-Indigenous peoples. To achieve this, the descriptive statistics make comparisons, where possible, over time between Indigenous and non-Indigenous peoples, between females and males, between Indigenous identity groups (First Nation, Métis, and Inuit), and between geographic areas (off and on reserve) with respect to demographic, housing, health, education, labour, and language characteristics and conditions.

2.1 Data Sources

The statistics presented below utilize three data sources: the Census of Population[4], the Canadian Community Health Survey (CCHS), and the Aboriginal Peoples Survey (APS). We use publicly-available Tables from the Census and Statistics Canada's Real Time Remote Access (RTRA) program to access data from the CCHS and APS.

To analyze trends over time, we use the three most recent Censuses of Population, which were enumerated in 2006, 2011, and 2016. Accordingly, we use CCHS and APS data from as near to each of the Census years from which we draw data. For the CCHS, we use the 2007/2008, 2011/2012, and 2015/2016 cycles; for the APS, we use the 2006, 2012, and 2017 editions.

The level of detail that we present for each statistic is restricted by the availability of data sources and the quality of estimates that can be produced from each. In particular, because the CCHS and APS are not enumerated on reserves, all of the statistics below from the CCHS and APS are for off-reserve populations only.

Because very few Métis and Inuit live on reserve, where we present data by Indigenous identity group and location on or off reserve, we only present data for Métis and Inuit off reserve, while presenting data separately for First Nations on reserve and First Nations off reserve.

2.2 Statistics and Analysis

2.2.1 Demographics

---

[4] National Household Survey (NHS) in 2011

Figure 2.2.1.1 – Population Distribution of Indigenous and Non-Indigenous Peoples, by Sex and Geographic Area, Canada, 2006 to 2016
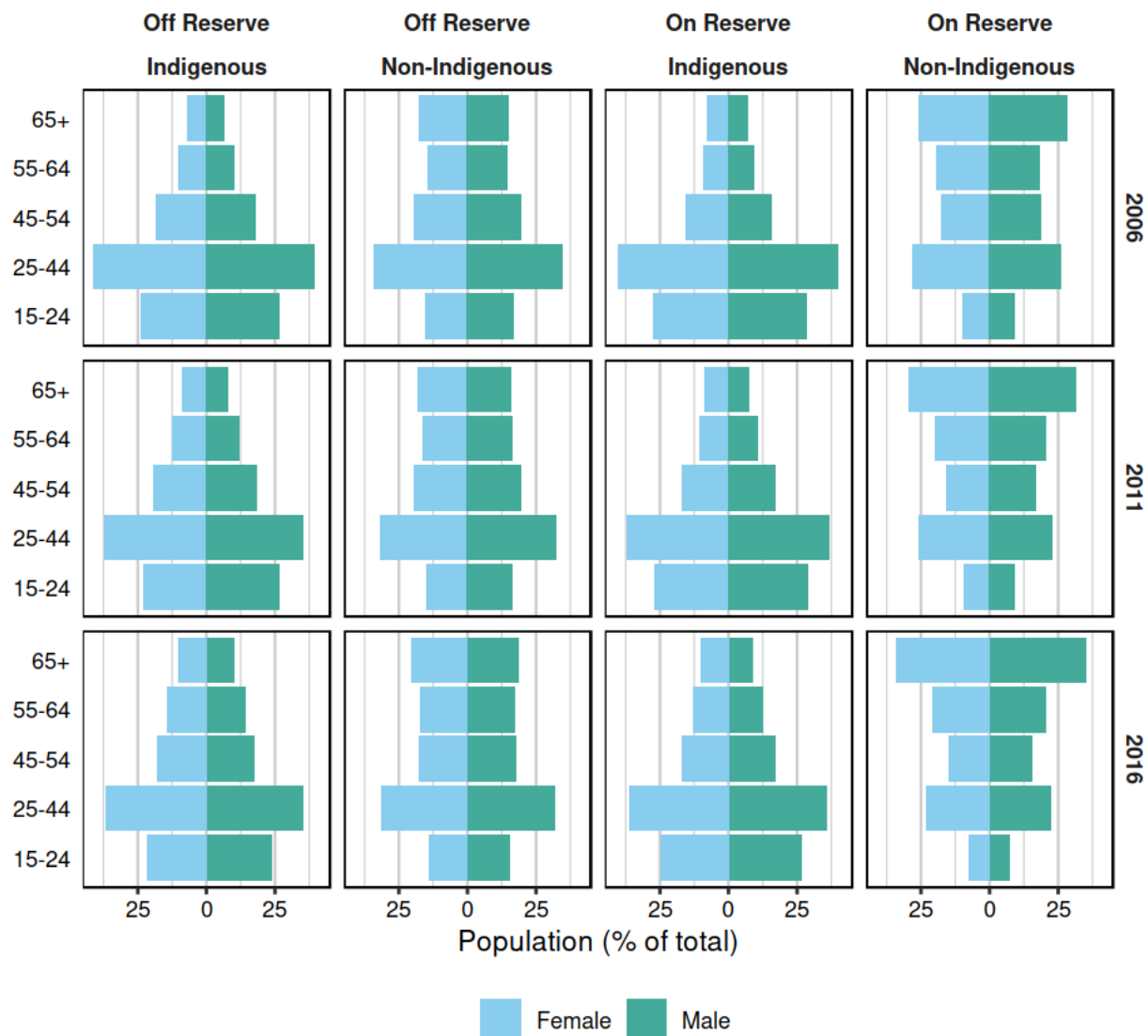
Source: 2006 *Census of Population*, 2011 *National Household Survey*, and 2016 *Census of Population* (Statistics Canada 2007; 2012; 2017b)

From 2006 to 2016, the Indigenous population aged 15 and older has increased more rapidly than the non-Indigenous population aged 15 and older (48.7% for the Indigenous population compared to 10.4% for the non-Indigenous population). The Indigenous population off reserve has grown especially fast, increasing by 60.2% from 2006 to 2016. The Indigenous population throughout the period 2006 to 2016 was substantially younger than the non-Indigenous population, with 59.0% of the Indigenous population in 2016 aged 15 and older being younger than 45 compared to 45.9% for the non-Indigenous population.

Figure 2.2.1.2 – Population Distribution of Indigenous Peoples, by Sex, Identity Group, and Geographic Area, Canada, 2006 to 2016
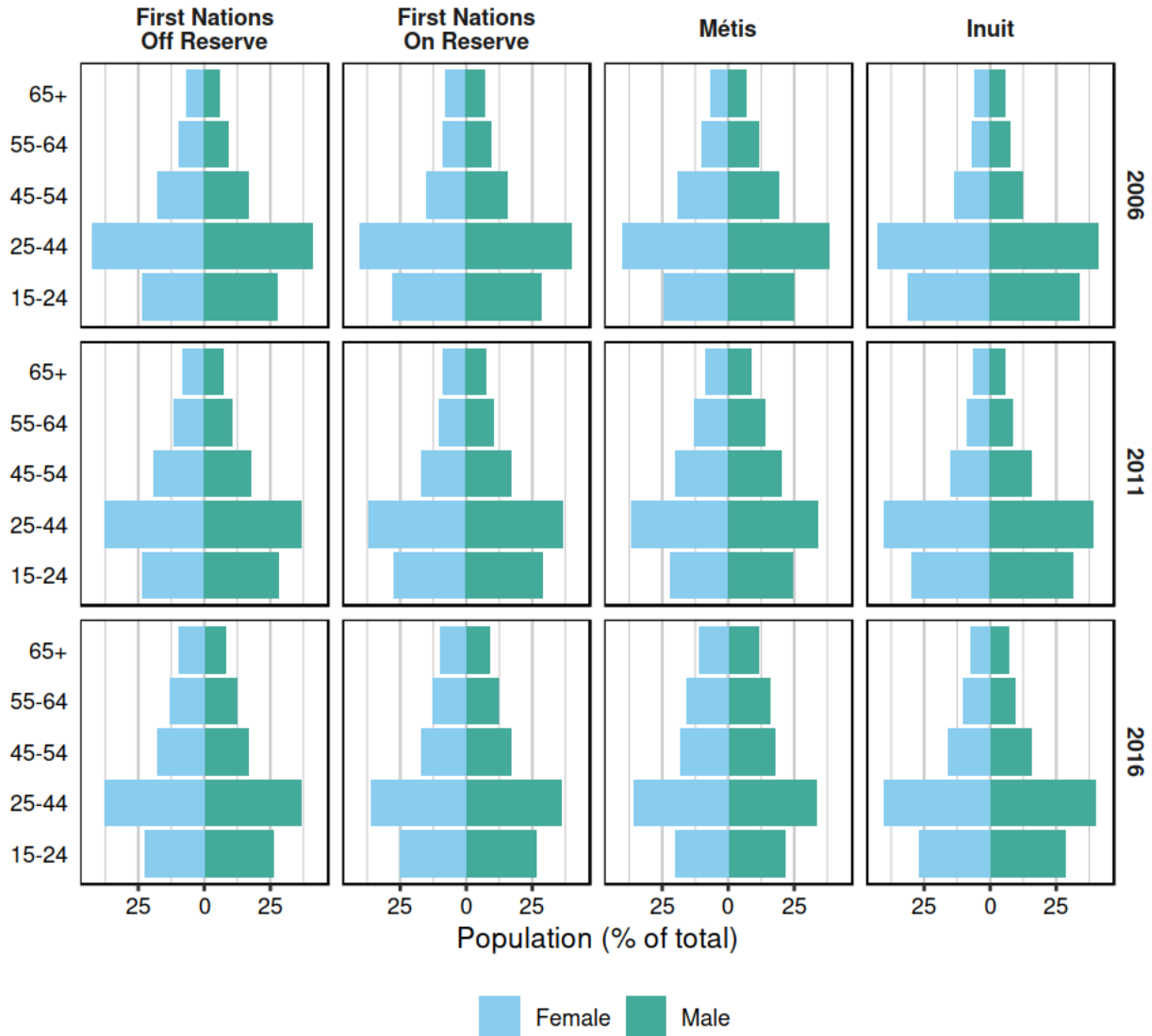
First Nations Off Reserve | First Nations On Reserve | Métis | Inuit

Population (% of total)

Female Male

From 2006 to 2016, the First Nations population aged 15 and older on reserve increased by 68.6%, compared to 14.9% for the First Nations population aged 15 and older off reserve, 57.5% for Métis, and 33.6% for Inuit. Throughout the period 2006 to 2016, Inuit were younger on average than the other Identity groups. In 2016, 67.4% of Inuit aged 15 and older were under 45 years of age, compared to 61.3% of First Nations on reserve, 61.5% of First Nations off reserve, and 55.2% of Métis.

Figure 2.2.1.3 - Marital Status of Indigenous and Non-Indigenous Peoples, by Sex, Canada, 2006 to 2016
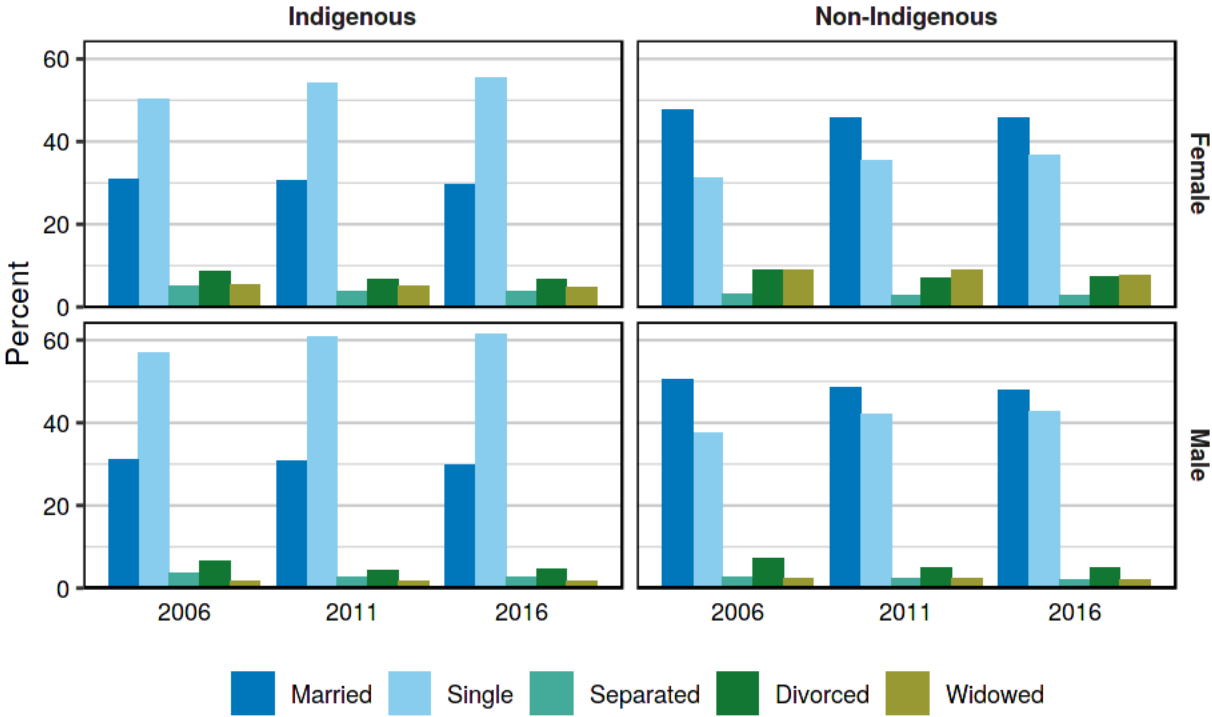
Note: "Single" includes all individuals who were never married, including those living common-law.
Source: 2006 *Census of Population*, 2011 *National Household Survey*, and 2016 *Census of Population* (Statistics Canada 2007; 2012; 2017b)

From 2006 to 2016, the percentage of individuals aged 15 and older who are married has remained roughly constant, for both Indigenous and non-Indigenous people and for males and females. The percentage of the Indigenous population that was married was significantly lower than the percentage of the non-Indigenous population throughout the period 2006 to 2016, for both sexes. In 2016, 29.6% of Indigenous persons 15 years and older were married, compared to 46.9% for non-Indigenous persons.

Figure 2.2.1.4 – Marital Status of Indigenous Peoples, by Sex and Identity Group (First Nation, Métis, and Inuit), Canada, 2006 to 2016
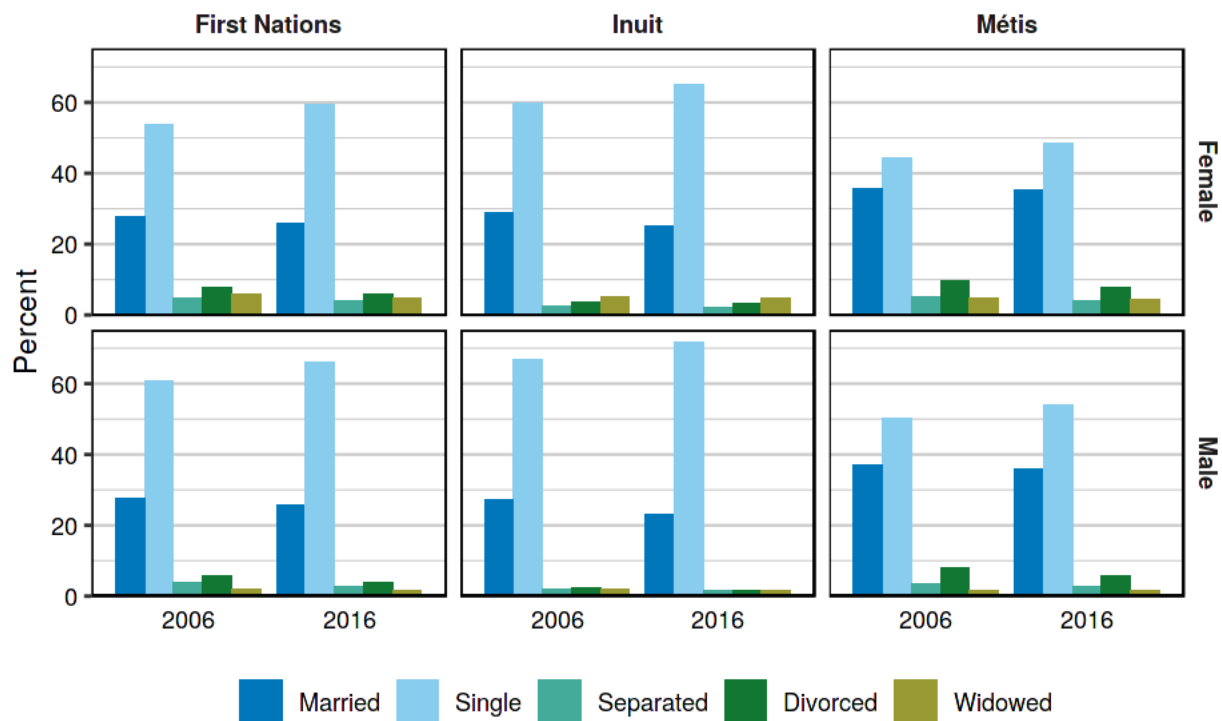
Note: "Single" includes all individuals who were never married, including those living common-law.
Source: 2006 *Census of Population*, 2011 *National Household Survey*, and 2016 *Census of Population* (Statistics Canada 2007; 2012; 2017b)

As was the case with the Indigenous and non-Indigenous populations, the percentage of each Indigenous identity group that was married remained relatively constant from 2006 to 2016, for both sexes. The percentage of the First Nations population aged 15 and over that was married was close to the percentage of the Inuit population; both were significantly lower than the percentage of Métis that were married. In 2016, 25.7% of First Nations and 24.2% of Inuit aged 15 and older were married, compared to 35.6% of Métis.

2.2.2 Housing

Figure 2.2.2.1 – Housing Tenure Status of Indigenous and Non-Indigenous Households, Canada, 2006 to 2016
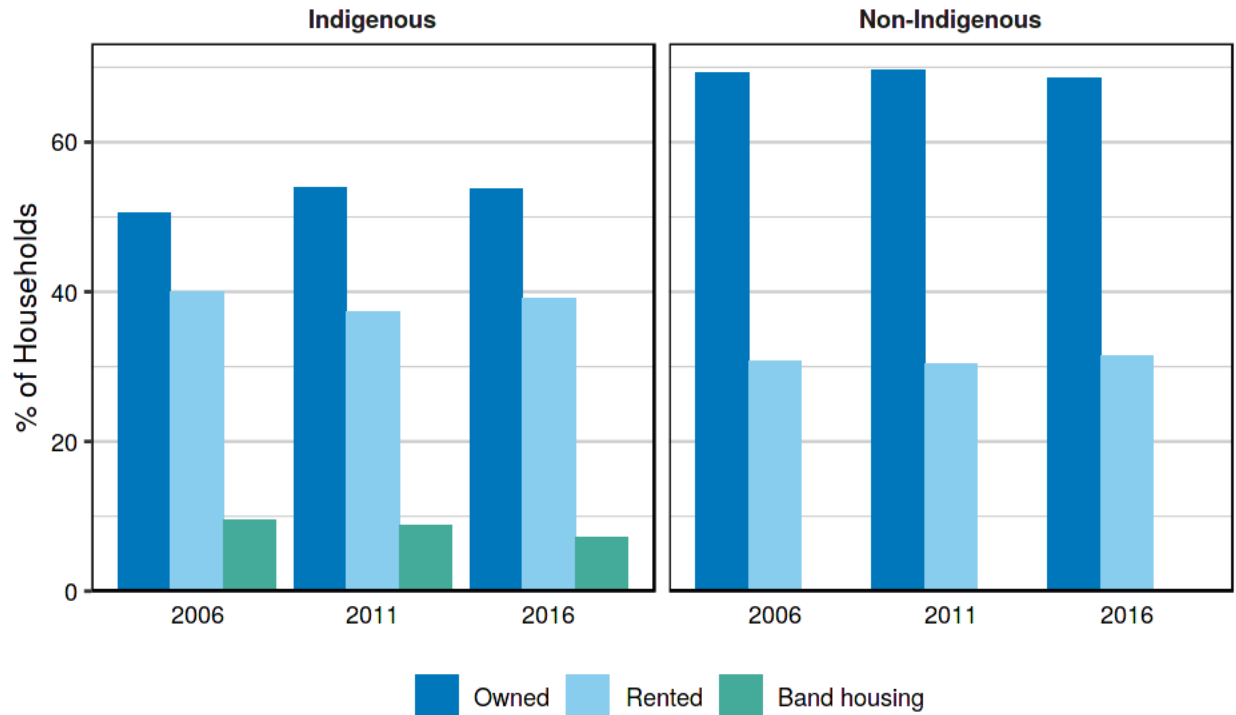
Source: 2006 *Census of Population*, 2011 *National Household Survey*, and 2016 *Census of Population* (Statistics Canada 2007; 2012; 2017b)

In 2006, 2011, and 2016, Indigenous households were more likely to rent their dwellings and less likely to own their dwellings when compared to the non-Indigenous population. In 2016, 53.8% of Indigenous households owned their dwellings and 39.0% rented, compared to 68.6% of non-Indigenous households that owned their dwellings and 31.4% of non-Indigenous households that rented. In 2016, 7.2% of Indigenous households lived in band housing, compared to 9.6% in 2006.

Figure 2.2.2.2 – Housing Suitability, Adequacy, and Affordability Status of Indigenous and Non-Indigenous Households, Canada, 2006 to 2016
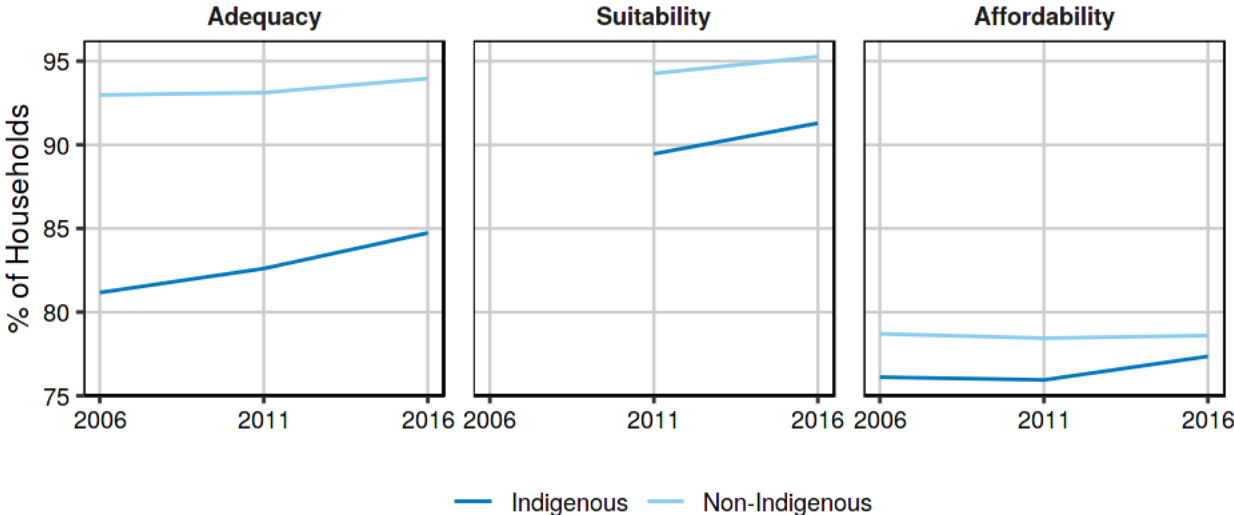
Note: The concept of suitability was introduced to the Census program in 2011; therefore, suitability cannot be assessed in the 2006 Census. Affordability is measured only for households with positive total household income, shelter costs less than 100% of total household income, and living off reserve and not in band housing.
Source: 2006 *Census of Population*, 2011 *National Household Survey*, and 2016 *Census of Population* (Statistics Canada 2007; 2012; 2017b)

Although Indigenous households improved on each of the components of core housing need from 2006 to 2016, Indigenous households remained significantly below non-Indigenous households on adequacy and suitability in 2016. The gap between Indigenous and non-Indigenous households was largest in the adequacy criterion; in 2016, 84.7% of Indigenous households had adequate dwellings compared to 94.0% of non-Indigenous households. In 2016, the percentage of Indigenous households living in affordable housing (77.4%) was only slightly lower than the percentage of non-Indigenous households (78.6%).

2.2.3 Health

Figure 2.2.3.1 – Perceived General Health Status of Indigenous and Non-Indigenous Peoples, by Sex, Canada, 2007/2008 to 2015/2016
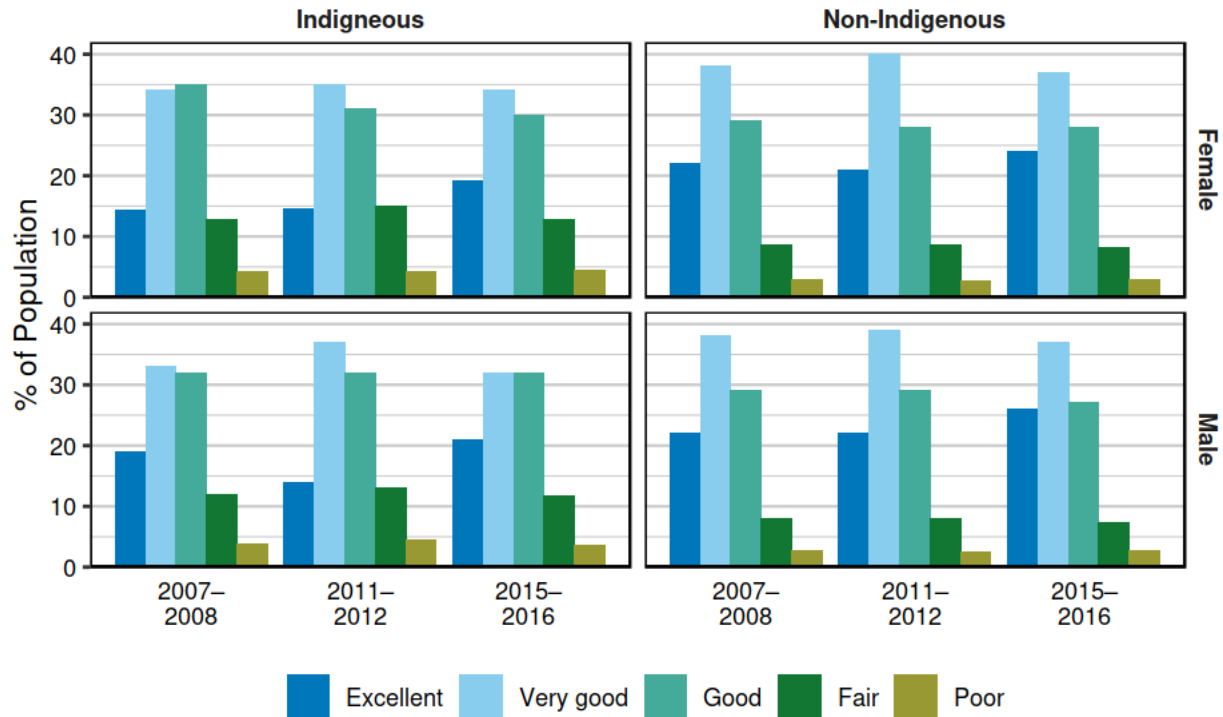
Source: 2007/2008, 2011/2012, and 2015/2016 *Canadian Community Health Survey* (Statistics Canada 2009; 2013a; 2017a)

From 2007 to 2016, Indigenous individuals were less likely than non-Indigenous individuals to rate their general health as "excellent" and more likely than non-Indigenous individuals to rate their health as "poor". In the 2015/2016 Canadian Community Health Survey (CCHS), 52.7% of Indigenous people rated their health as "very good" or "excellent", compared to 62.1% of non-Indigenous people.

Figure 2.2.3.2 – Perceived General Health Status of Indigenous Peoples, by Sex and Identity Group (First Nation, Métis, and Inuit), Canada, 2007/2008 to 2015/2016
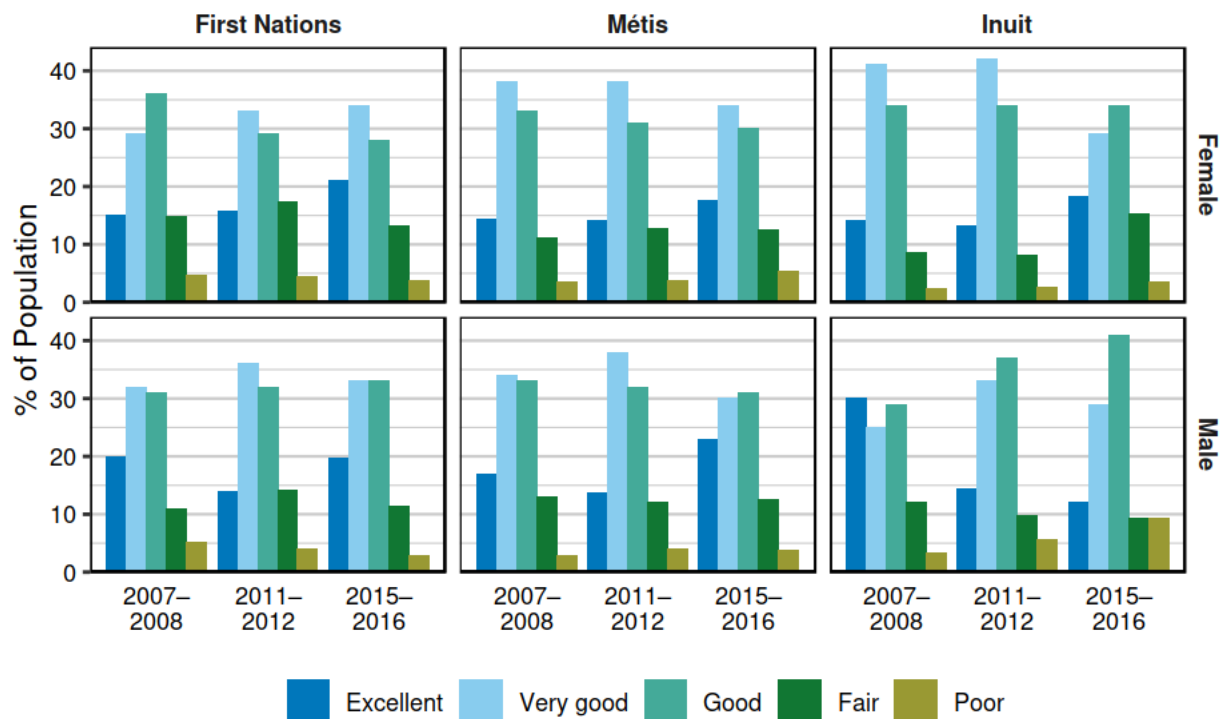
Source: 2007/2008, 2011/2012, and 2015/2016 *Canadian Community Health Survey* (Statistics Canada 2009; 2013a; 2017a)

Compared to First Nations and Métis, Inuit were less likely in the 2015/2016 CCHS to rate their health as "very good" or "excellent" (43.5% for Inuit compared to 54.2% for First Nations and 52.5% for Métis).

Figure 2.2.3.3 – Perceived Mental Health Status of Indigenous and Non-Indigenous Peoples, by Sex, Canada, 2007/2008 to 2015/2016
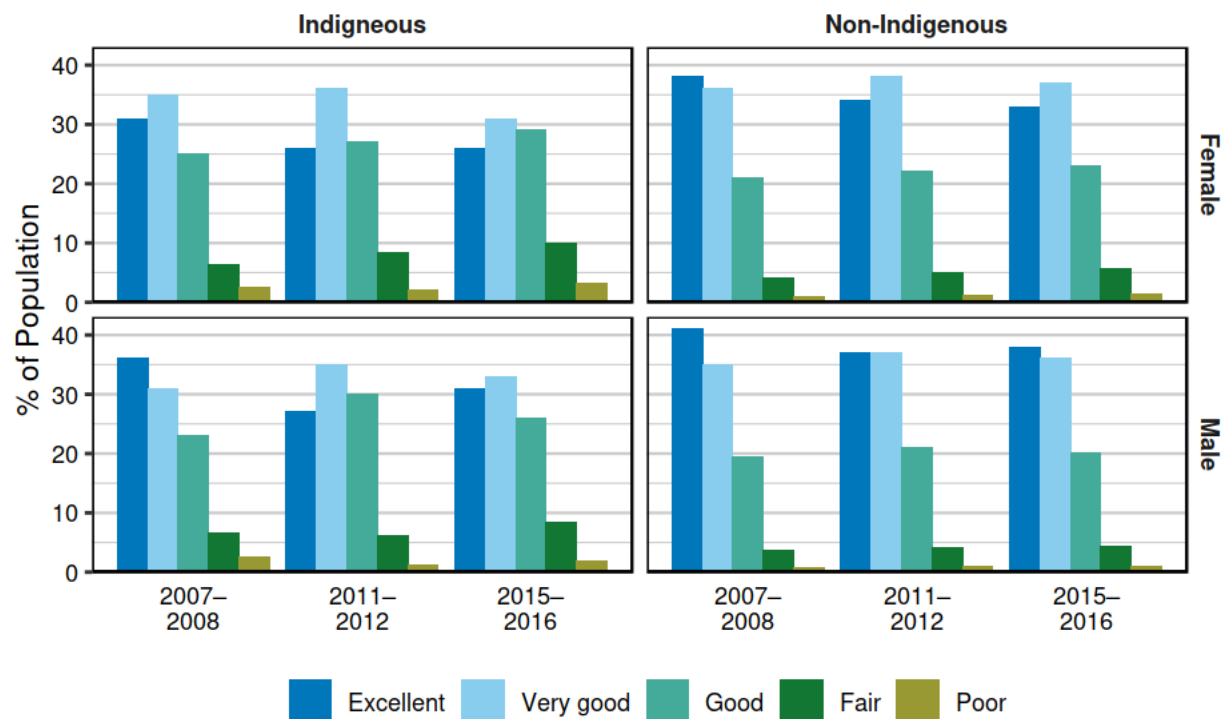
Source: 2007/2008, 2011/2012, and 2015/2016 *Canadian Community Health Survey* (Statistics Canada 2009; 2013a; 2017a)

From 2007 to 2016, Indigenous individuals were less likely than non-Indigenous individuals to rate their mental health as "excellent" and more likely than non-Indigenous individuals to rate their mental health as "poor". In the 2015/2016 Canadian Community Health Survey (CCHS), 60.7% of Indigenous people rated their mental health as "very good" or "excellent", compared to 72.3% of non-Indigenous people.

19

Figure 2.2.3.4 – Perceived Mental Health Status of Indigenous Peoples, by Sex and Identity Group (First Nation, Métis, and Inuit), Canada, 2007/2008 to 2015/2016
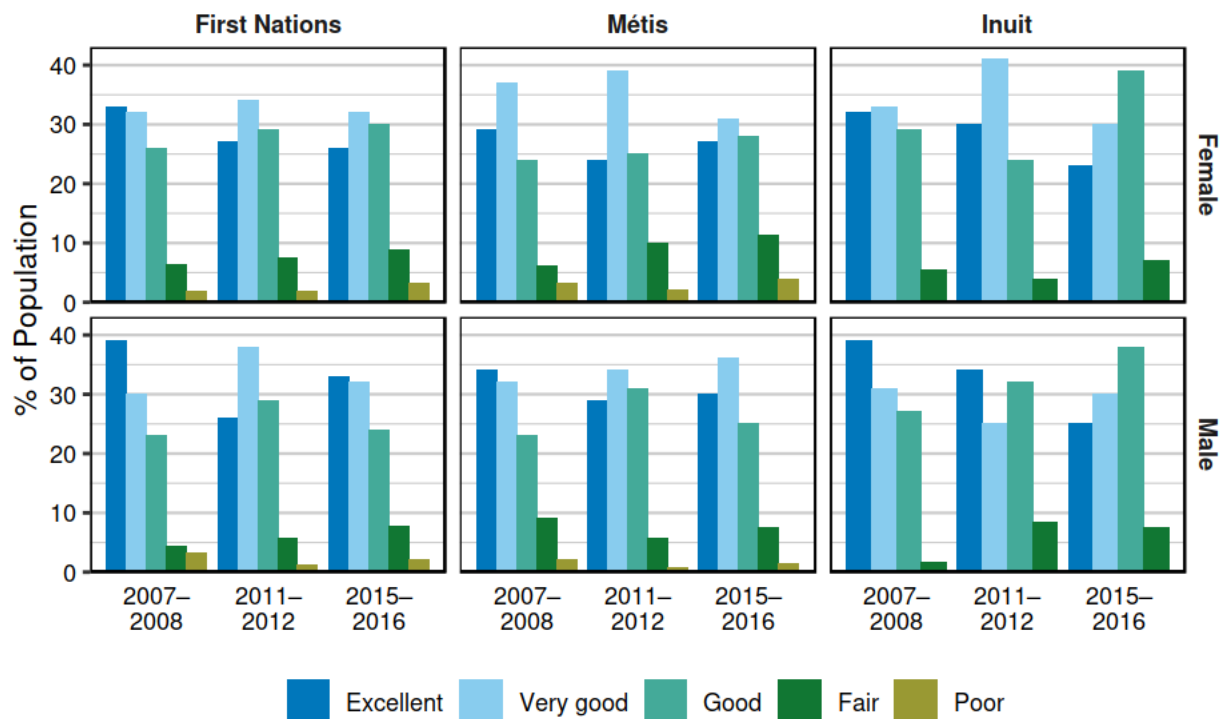
Note: Estimates of the proportion of Inuit with poor-rated mental health are too unreliable to publish.
Source: 2007/2008, 2011/2012, and 2015/2016 *Canadian Community Health Survey* (Statistics Canada 2009; 2013a; 2017a)

Among Indigenous identity groups, Inuit were the least likely to rate their mental health as being "very good" or "excellent" in the CCHS. From the 2015/2016 CCHS, an estimated 54.0% of Inuit rate their mental health as "very good" or "excellent", compared to 61.8% of First Nations and 61.6% of Métis.

Figure 2.2.3.5 – Household Food Security Status of Indigenous and Non-Indigenous Peoples, by Sex, Canada, 2007/2008 to 2015/2016
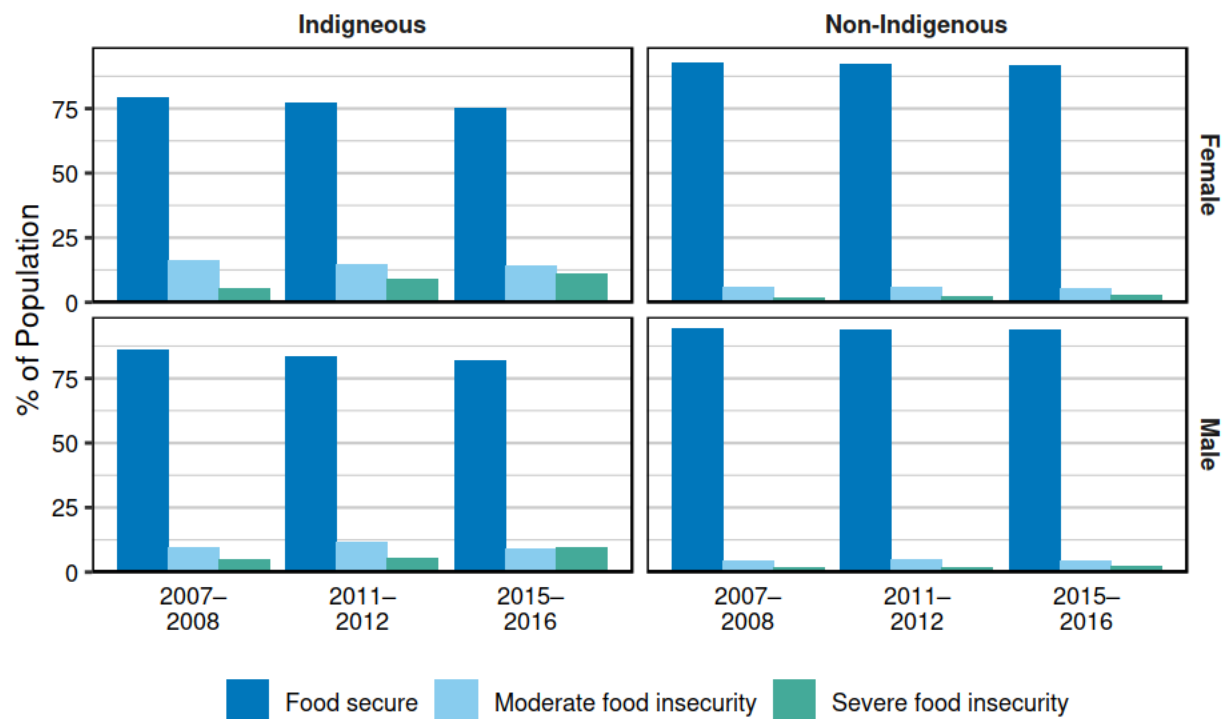
Source: 2007/2008, 2011/2012, and 2015/2016 *Canadian Community Health Survey* (Statistics Canada 2009; 2013a; 2017a)

Compared to non-Indigenous people, Indigenous people in each of the 2007/2008, 2011/2012, and 2015/2016 CCHS cycles were less likely to live in food secure households. The 2015/2016 CCHS estimated that 78.0% of Indigenous people lived in food secure households, compared to 92.7% of non-Indigenous people. In 2015/2016, 10.2% of Indigenous people lived in households with severe food insecurity, as opposed to just 2.5% of non-Indigenous people. The percentage of Indigenous people living in severely food insecure households doubled from 2007/2008 (5.1%) to 2015/2016 (10.2%).

Figure 2.2.3.6 – Household Food Security Status of Indigenous Peoples, by Sex and Identity Group (First Nation, Métis, and Inuit), Canada, 2006 to 2016

Among Indigenous identity groups, Inuit were the least likely to live in food secure households from 2007/2008 to 2015/2016. In 2015/2016, 26.4% of Inuit lived in households with severe food security, compared to 10.8% of First Nations and 8.4% of Métis. The percentage of Inuit living in severely food insecure households increased from 7.7% in 2007/2008 to 26.4% in 2015/2016.

Figure 2.2.3.7 – Sense of Belonging to Local Community of Indigenous and non-Indigenous people, by Sex, Canada, 2007/2008 to 2015/2016
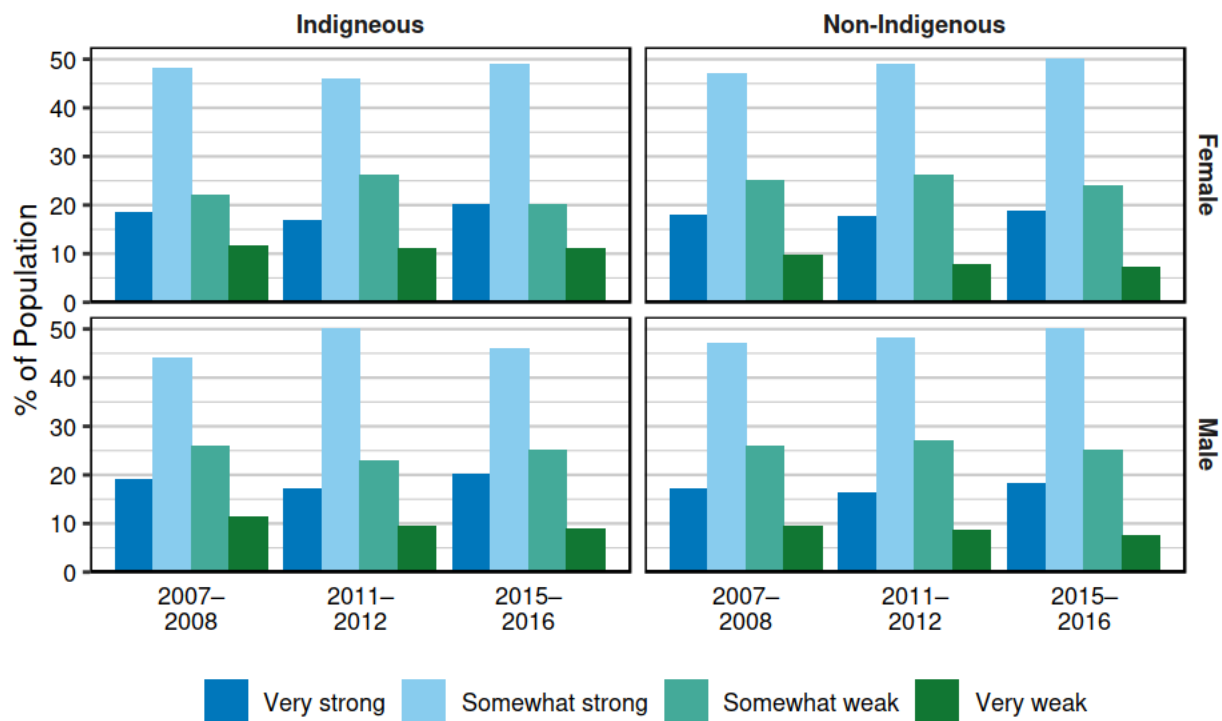
Source: 2007/2008, 2011/2012, and 2015/2016 *Canadian Community Health Survey* (Statistics Canada 2009; 2013a; 2017a)

From 2007/2008 to 2015/2016, Indigenous people were about as likely as non-Indigenous people to rate their sense of belonging to their local community as "very strong" or "somewhat strong". In 2015/2016, 67.5% of Indigenous people rated their sense of belonging to their local community as "very strong" or "somewhat strong", compared to 68.5% of non-Indigenous people.

Figure 2.2.3.8 – Sense of Belonging to Local Community of Indigenous Peoples, by Sex and Identity Group (First Nation, Métis, and Inuit), Canada, 2007/2008 to 2015/2016
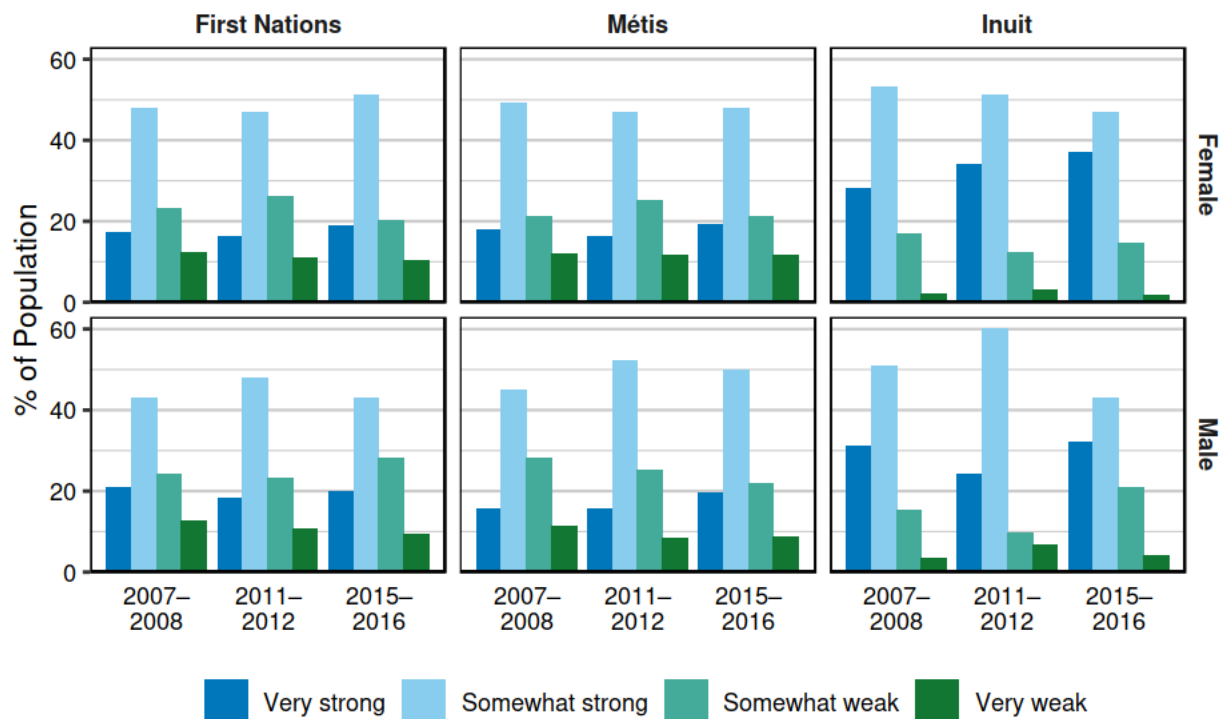
Source: 2007/2008, 2011/2012, and 2015/2016 *Canadian Community Health Survey* (Statistics Canada 2009; 2013a; 2017a)

From 2007/2008, among Indigenous identity groups, Inuit were most likely to rate their sense of belonging to their local community as "very strong", and least likely to rate their sense of belonging to their local community as "very weak". In 2015/2016, 78.7% of Inuit rated their sense of belonging to their local community as "very strong" or "somewhat strong", compared to 66.2% of First Nations and 68.3% of Métis.

2.2.4 Education

Figure 2.2.4.1 – Educational Attainment of Indigenous and Non-Indigenous Peoples, by Geographic Area, Canada, 2006 to 2016
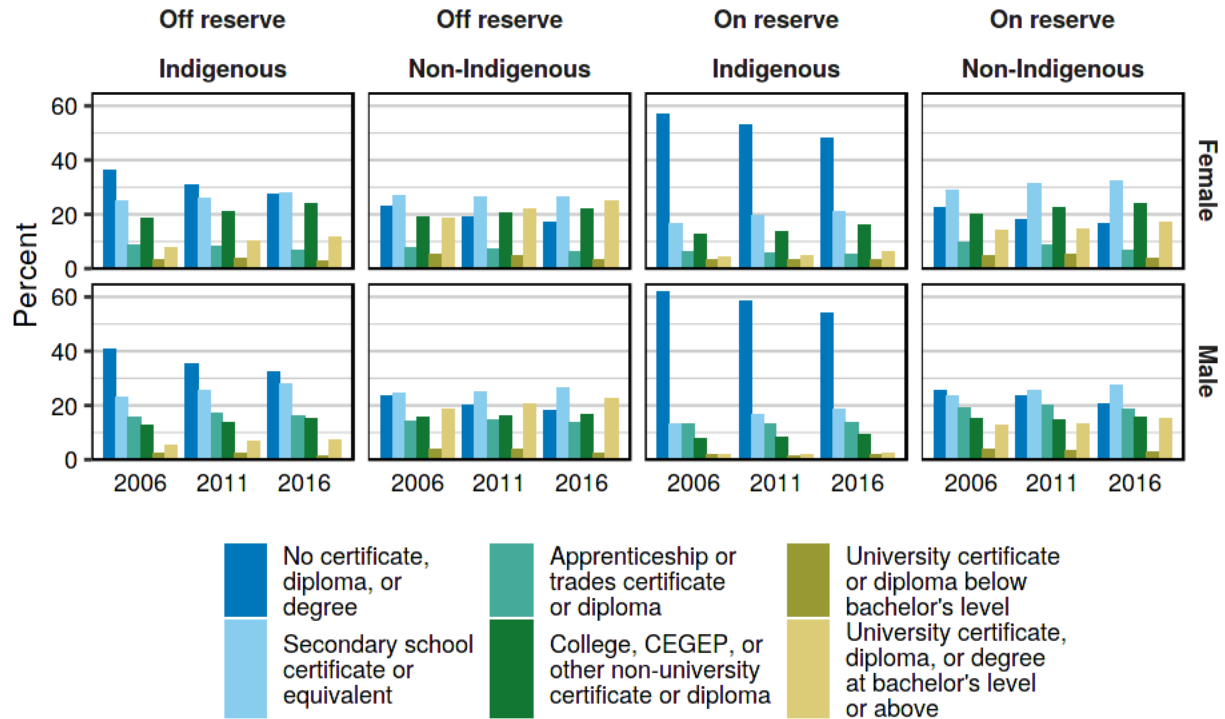
Source: 2006 *Census of Population*, 2011 *National Household Survey*, and 2016 *Census of Population* (Statistics Canada 2007; 2012; 2017b)

From 2006 to 2016, the percentage of the Indigenous population without any certificate, degree or diploma declined, both on and off reserve, and for both sexes. However, in 2016, the percentage of Indigenous people without any certificate, diploma, or degree (33.6%) was still substantially above that of non-Indigenous people (17.7%). Correspondingly, both on and off reserve, non-Indigenous people (23.9%) were more likely in 2016 to hold university degrees than Indigenous people (8.6%). From 2006 to 2016, Indigenous people living on reserve were much more likely not to have any certificate, diploma, or degree; in 2016, 51.0% of Indigenous people on reserve had no certificate, diploma, or degree, compared to 29.6% of Indigenous people off reserve.

Figure 2.2.4.2 – Educational Attainment of Indigenous Peoples, by Sex and Identity Group (First Nation, Métis, and Inuit) and Geographic Area, Canada, 2006 to 2016
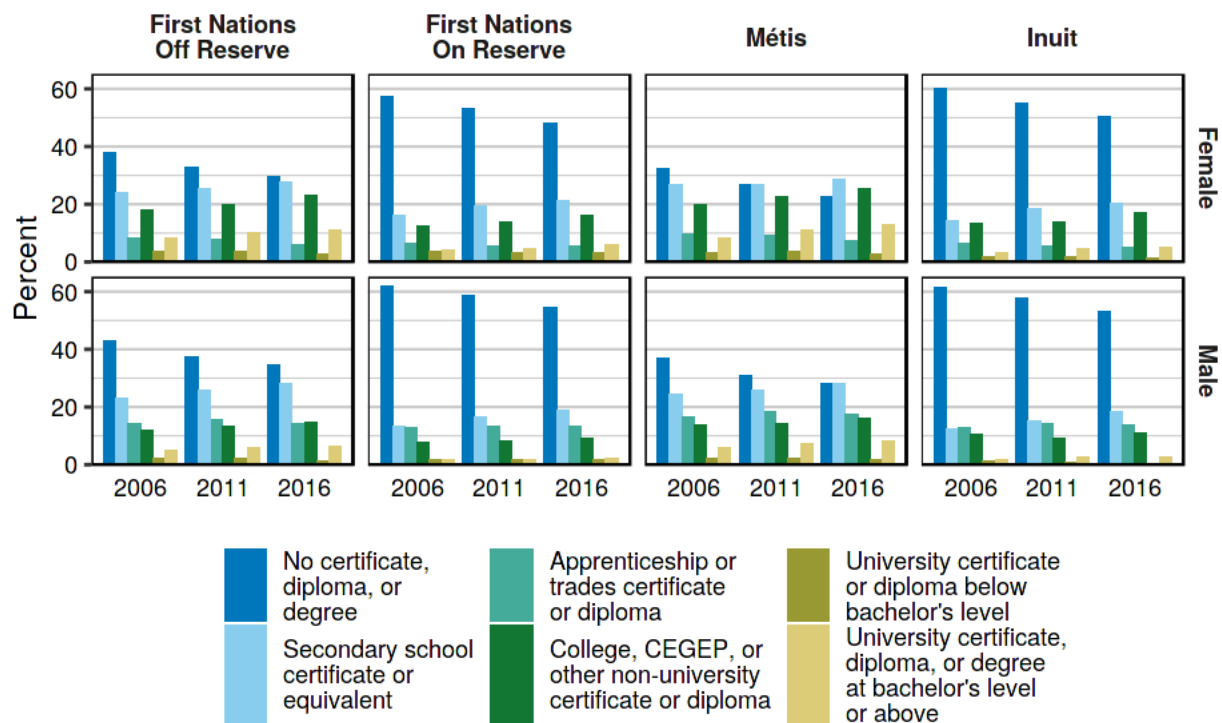
Source: 2006 *Census of Population*, 2011 *National Household Survey*, and 2016 *Census of Population* (Statistics Canada 2007; 2012; 2017b)

Among Indigenous identity groups, Métis were most likely from 2006 to 2016 to have attained a post-secondary education. In 2016, 46.3% of Métis had completed some form of post-secondary education, compared to 40.2% of First Nations off reserve, 28.8% of First Nations on reserve, and 28.7% of Inuit.

2.2.5 Labour Market

Figure 2.2.5.1 – Unemployment Rate of Indigenous and Non-Indigenous Peoples, by Geographic Area, Canada, 2006 to 2016
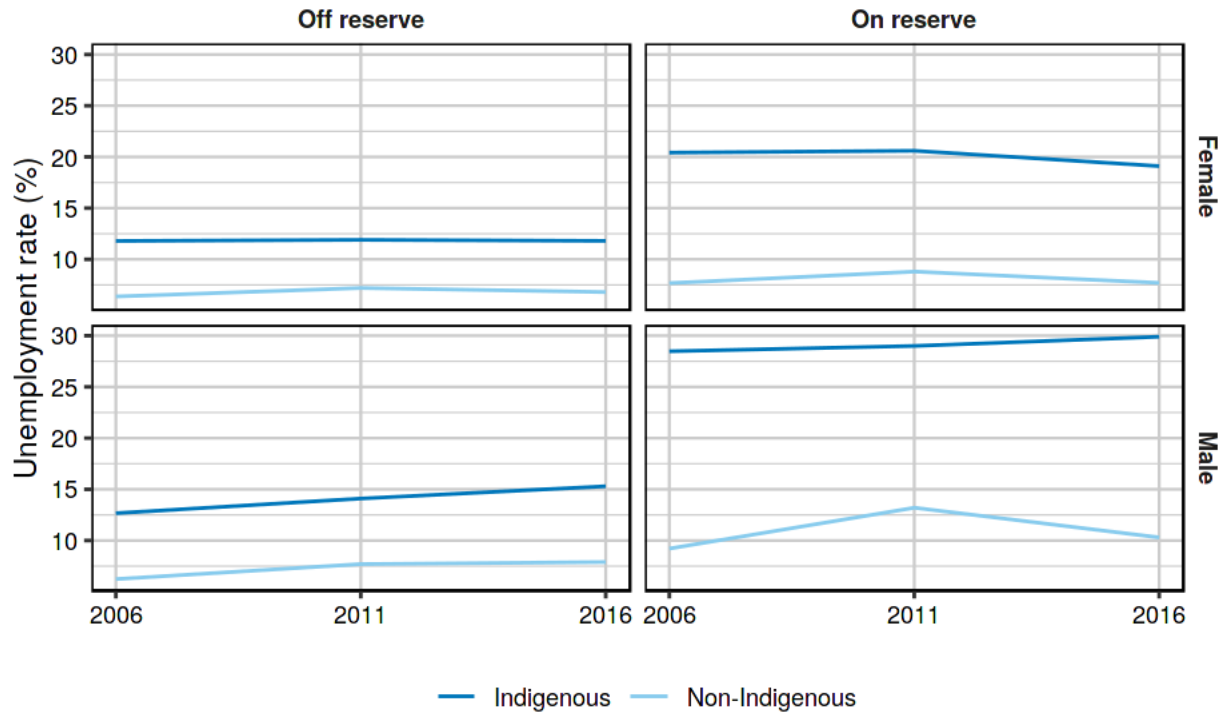
Source: 2006 *Census of Population*, 2011 *National Household Survey*, and 2016 *Census of Population* (Statistics Canada 2007; 2012; 2017b)

Both on and off reserve, the unemployment rate for Indigenous people was higher than the unemployment rate for non-Indigneous people from 2006 to 2016. While the unemployment rate for non-Indigenous people was about equal on and off reserve, the unemployment rate for Indigenous people was substantially higher on reserve than off reserve. For Indigenous people on reserve, the unemployment rate for males was substantially higher than for females from 2006 to 2016; in 2016, the unemployment rate for Indigenous males on reserve was 29.9%, compared to 19.1% for Indigenous females on reserve.

Figure 2.2.5.2 – Unemployment Rate of Indigenous Peoples, by Identity Group (First Nation, Métis, and Inuit) and Geographic Area, Canada, 2006 to 2016
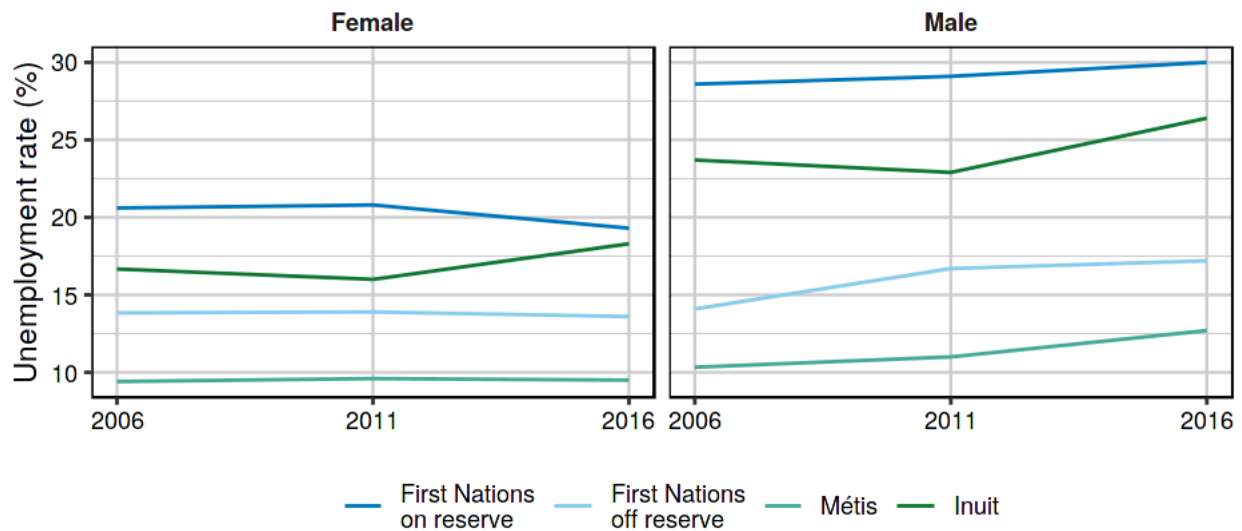
Source: 2006 *Census of Population*, 2011 *National Household Survey*, and 2016 *Census of Population* (Statistics Canada 2007; 2012; 2017b)

Among Indigenous identity groups, the Métis had the lowest unemployment rate from 2006 to 2016, while First Nations on reserve had the highest, for both sexes. However, the unemployment rate for Inuit was significantly above the unemployment rate for both First Nations on reserve and Métis. For both First Nations on reserve and Inuit, the unemployment rate for males was much higher than for females (in 2016: 30.0% for First Nations males on reserve compared to 19.3% for females; 26.4% for Inuit males compared to 18.3% for Inuit females).

Figure 2.2.5.3 – Labour Force Participation Rate of Indigenous and Non-Indigenous Peoples, by Geographic Area, Canada, 2006 to 2016
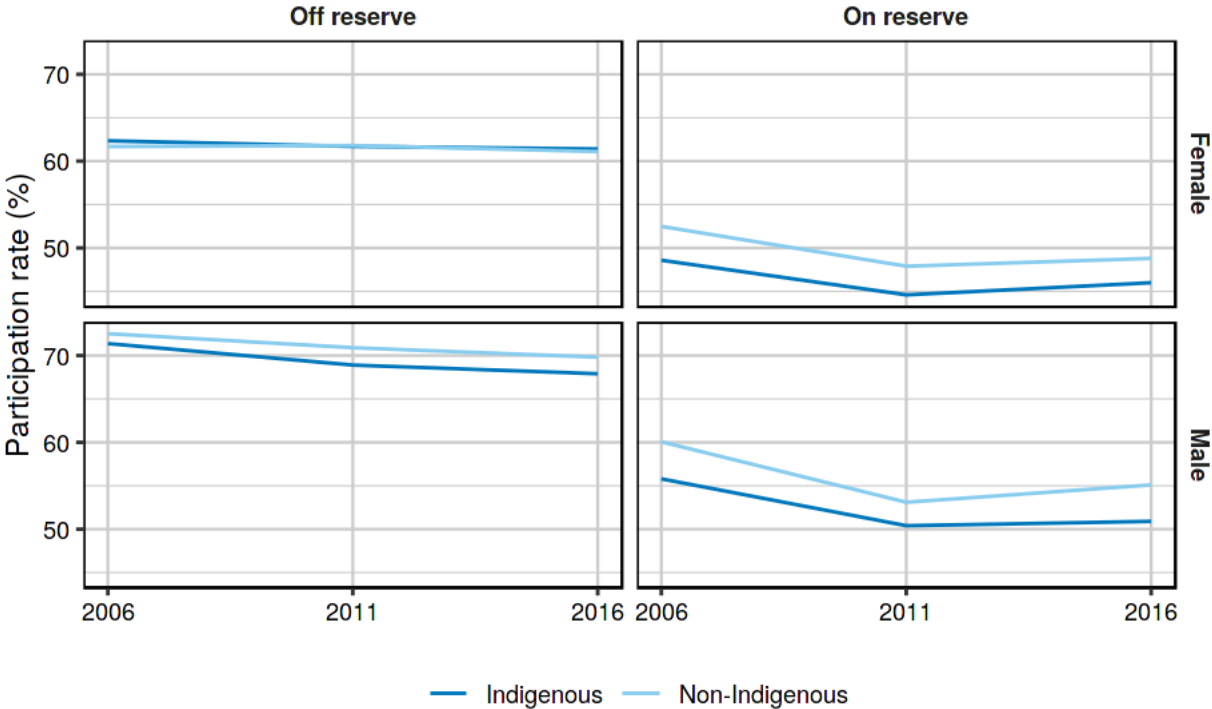
Source: 2006 *Census of Population*, 2011 *National Household Survey*, and 2016 *Census of Population* (Statistics Canada 2007; 2012; 2017b)

Both on and off reserve, and for both sexes, the labour force participation rate for Indigenous people from 2006 to 2016 was about the same as the participation rate for non-Indigenous people. The participation rate on reserve was much lower on reserve than off reserve, a pattern that held for both sexes and for Indigenous and non-Indigenous people. In 2016, the participation rate for Indigenous males off reserve was 67.9% compared to 50.9% for Indigenous males on reserve, and the participation rate for Indigenous females was 61.4% off reserve compared to 46.0% on reserve. For both Indigenous people and non-Indigenous people of both sexes, on and off reserve, the participation rate declined slightly from 2006 to 2016.

Figure 2.2.5.4 – Labour Force Participation Rate of Indigenous Peoples, by Identity Group (First Nation, Métis, and Inuit) and Geographic Area, Canada, 2006 to 2016
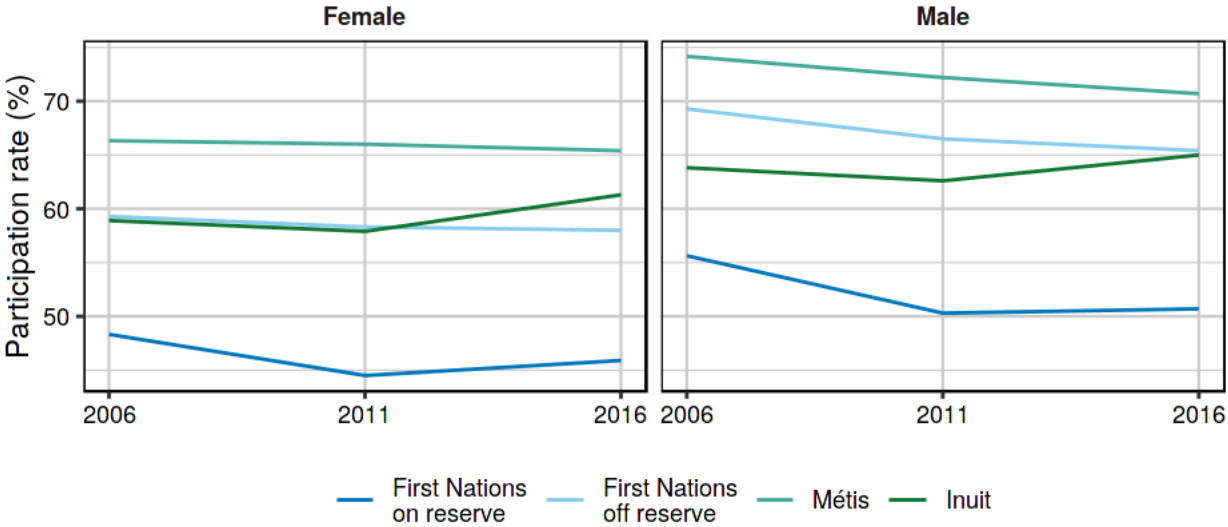
Source: 2006 *Census of Population*, 2011 *National Household Survey*, and 2016 *Census of Population* (Statistics Canada 2007; 2012; 2017b)

The labour force participation rate for First Nations on reserve was much lower than the participation rate for First Nations off reserve, Métis, and Inuit from 2006 to 2016. Over that period, the participation rate for Inuit increased slightly, while the participation rate for First Nations and Métis declined. From 2006 to 2016, for both sexes, the participation rate for Métis was the highest among identity groups. In 2016, the participation rate for Métis males was 70.7% compared to 50.7% for First Nations males on reserve, 65.4% for First Nations males off reserve, and 65.0% for Inuit males. For females in 2016, the participation rate for Métis was 65.4%, compared to 45.9% for First Nations on reserve, 58.0% for First Nations off reserve, and 61.3% for Inuit.

Figure 2.2.5.5 – Median Total Before-Tax Personal Income of Indigenous and Non-Indigenous Peoples, by Sex, Canada, 2006 to 2016
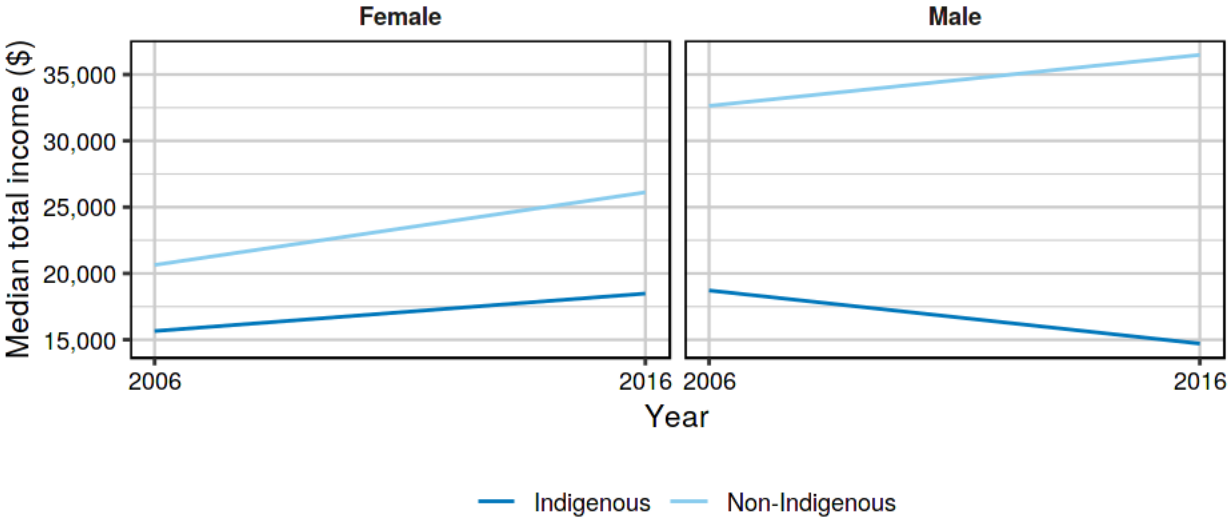
Note: Personal income statistics are not available for non-Indigenous people from the 2011 NHS.
Source: 2006 *Census of Population* and 2016 *Census of Population* (Statistics Canada 2007; 2017b)

In both 2006 and 2016, the median total income for Indigenous people was less than the median total income for non-Indigenous people, for both sexes. From 2006 to 2016, the median total income for Indigenous females increased, but by a lesser amount than the median total income for non-Indigenous females. In contrast, the median total income for Indigenous males declined from 2006 to 2016, while the median total income for non-Indigenous males increased. As a result, for both sexes, the gap in median personal income between Indigenous and non-Indigenous people increased from 2006 to 2016. In 2006, Indigenous males had a higher median total income than Indigenous females, where in 2016, the reverse was true. This contrasts with the situation for non-Indigenous people, where in both 2006 and 2016 the median personal income for males was above that for females. In 2016, the median total personal income for Indigenous females was $18,483, compared to $26,119 for non-Indigenous females. The median total personal income was $14,706 for Indigenous males and $36,483 for non-Indigenous males in 2016.

Figure 2.2.5.6 – Median Total Before-Tax Income of Indigenous Peoples, by Identity Group (First Nation, Métis, and Inuit), Canada, 2006 to 2016
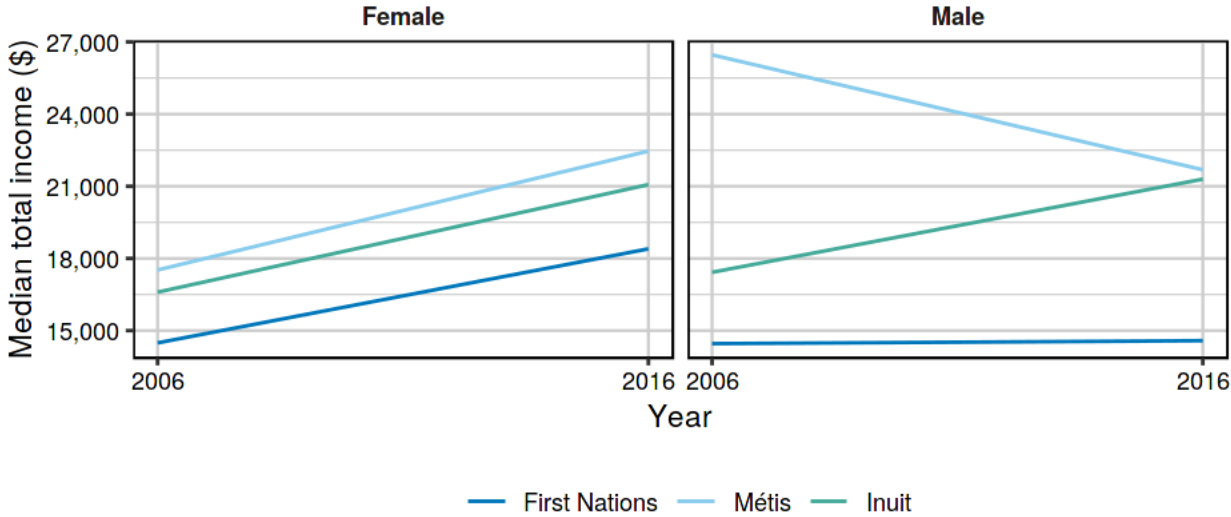
Note: Personal income statistics are not available for Indigenous identity groups people from the 2011 NHS.
Source: 2006 *Census of Population* and 2016 *Census of Population* (Statistics Canada 2007; 2017b)

From 2006 to 2016, the median total personal income of females for all Indigenous identity groups increased by about the same amount. For males, however, the median personal income of Métis declined from 2006 to 2016, while that of Inuit increased. Thus, in 2016, the median personal income for Métis males was about equal to that of Inuit males. In 2016, for First Nations and Métis, the median personal income of females was above the median personal income of males, opposite to the situation for non-Indigenous people and Inuit.

2.2.6 Language

Figure 2.2.6.1 – Indigenous Language Use at Home of Indigenous Peoples, by Sex, Canada, 2006 to 2016
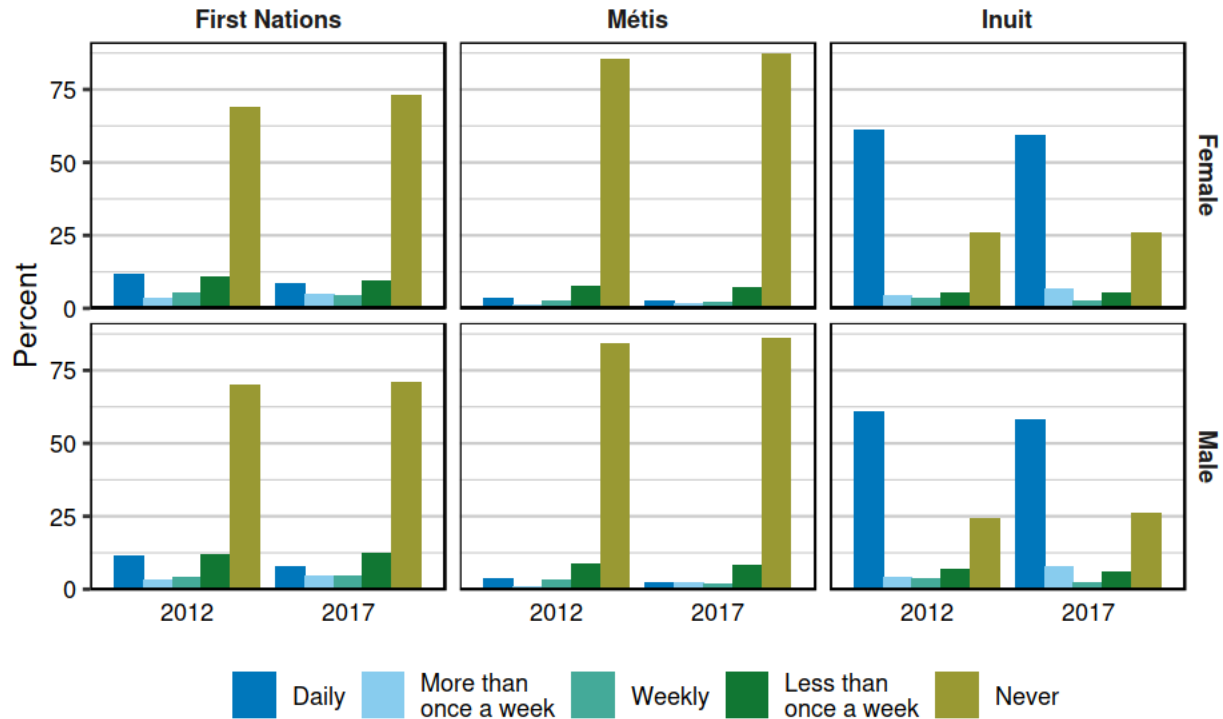
Note: The question concerning home language use in the 2006 Aboriginal Peoples Survey is not comparable to the question in the 2012 and 2017 APS. Thus data are only presented for 2012 and 2017.
Source: 2012 *Aboriginal Peoples Survey* and 2017 *Aboriginal Peoples Survey* (Statistics Canada 2013b; 2018)

In 2012 and 2017, Inuit were much more likely than First Nations and Métis to use an Indigenous language at home on a daily basis, and much less likely to never use an Indigenous language at home. For all three Indigenous identity groups, females were slightly more likely than males to use an Indigenous language at home. In 2017, 59.0% of Inuit used an Indigenous language at home on a daily basis, compared to just 8.1% of First Nations and 2.3% of Métis.

Figure 2.2.6.2 – Indigenous Language Use at Work of Indigenous Peoples, by Identity Group (First Nation, Métis, and Inuit), Canada, 2016
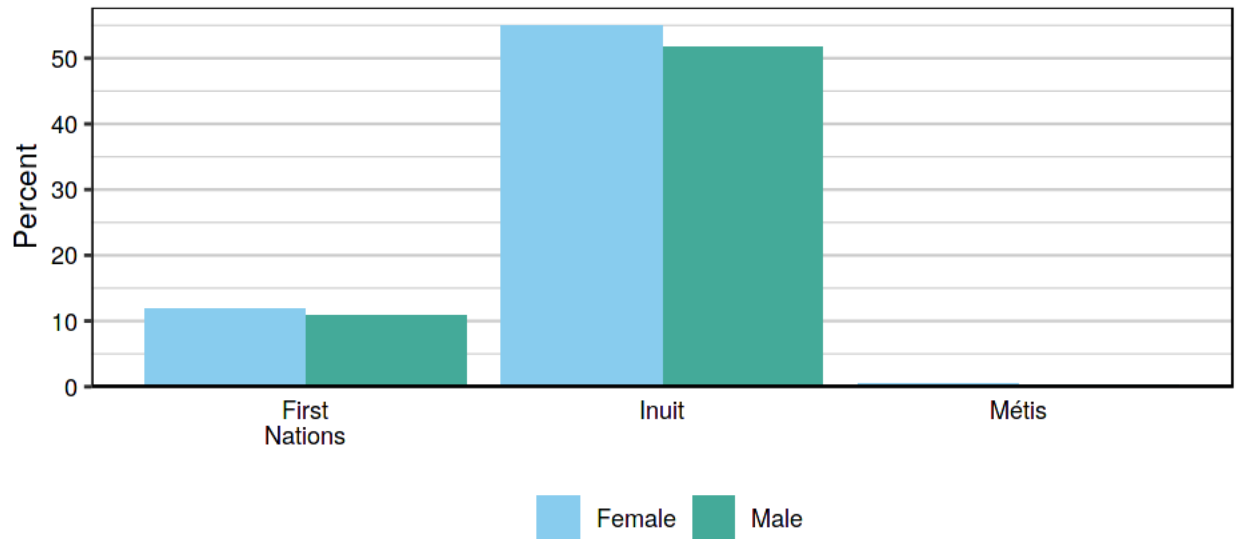
Source: 2016 *Census of Population* (Statistics Canada 2017b)

In 2016, Inuit were much more likely to use an Indigenous language at work than First Nations or Métis. Whereas 53.3% of Inuit used an Indigenous language at work in 2016, only 11.4% of First Nations and 0.4% of Métis did.

3.0 Health

Key Findings

- Perceived General Health:
  - General health is substantially better among Indigenous people that reside in owned homes.
  - Indigenous people with adequate, suitable, or affordable housing are substantially better off in terms of general health.
  - Multigenerational households are associated with a substantial reduction in the likelihood of an Indigenous person having good general health.
  - Household composition does not appear to influence good general health for Indigenous people.
  - Indigenous people residing in single-detached dwellings have the greatest odds of having good general health.

- Perceived Mental Health:
  - Mental health appears to be better among Indigenous people that reside in owned homes.
  - Suitable housing appears to decrease the odds of an Indigenous person having good mental health.
  - The type of dwelling that an Indigenous person resides in appears to have no influence over their mental health status.
  - Household composition, including size and number of household maintainers, does not appear to influence mental health status for Indigeous people.
  - Indigenous people residing in multigenerational households do not appear to have any greater or lesser odds of good mental health.

- Food Security Status:
  - Indigenous people residing in owned dwellings are much more likely to be food secure than those residing in non-subsidized rentals, who are more likely to be food secure than those residing in subsidized rentals.
  - Indigenous people residing in affordable, adequate, and suitable homes are more food secure than those in unaffordable, inadequate, and unsuitable homes, respectively.
  - Dwelling types appear to have a substantial influence on the likelihood of Indigenous people being food secure.

- Sense of Belonging to One's Own Indigenous Group
  - Residing in an owned dwelling and having suitable housing are both associated with lower odds of a sense of belonging.
  - Dwelling type is not associated with an Indigenous person's sense of belonging.
  - Household composition factors, such as size, number of maintainers, and multigenerational status, do not influence sense of belonging.

The following list presents the background characteristics as indicated by the literature review that explain health outcomes (i.e., perceived general health, perceived mental health, food security, and sense of belonging to one's own Indigenous group) for Indigenous people aged 15 years or more. These characteristics are broken down by category.

Individual Socio-Demographic and Indigenous Characteristics:
- Sex
- Age
- Marital status
- Indigenous identity group
- Indigenous citizenship
- Registration status
- Indigenous mother tongue

Dwelling and Household Characteristics:
- Housing tenure
- Dwelling type
- Adequacy
- Affordability
- Suitability
- Household income
- Household size
- Number of household maintainers
- Multigenerational household status

Individual Human Capital and Labour Market Characteristics:
- Highest level of schooling
- Labour force status

Health Characteristics:
- Perceived general health
- Perceived mental health
- Food security status
- Sense of belonging to one's own Indigenous group

Geographic Characteristics:
- Province / territory
- Geographic setting
- 1-year mobility status
- 5-year mobility status

3.1 Health Data Sources and Analysis

We use a single sample based on the APS for the analysis of four health outcome variables: *General Health*, *Mental Health*, *Food Security*, and *Sense of Belonging*. The sample is restricted to Canadian-born, Indigenous people aged 15 years or older that resided outside of a reserve.

One of the limitations to the use of APS data alone is that we are unable to make comparisons between results that include or exclude non-Indigenous people. The Census does not provide a viable alternative as it does not include any corresponding health variables. The CCHS, on the other hand, does not include sufficient variables on household and dwelling characteristics (e.g., *Adequate Housing*, *Affordable Housing*, and *Suitable Housing*).

We use five model specifications to analyze the simultaneous influence of multiple factors on each of the health outcomes. Model 1 examines the influence of the individual's socio-demographic and Indigenous characteristics. This model controls for *Age*, *Sex*, *Marital Status*, *Indigenous Identity Group*, *Indigenous Citizenship*, *Registration Status*, and *Indigenous Mother Tongue*.

Model 2 builds on the first model by also examining the influence of dwelling and household characteristics. Dwelling characteristics include *Tenure*, *Dwelling Type*, *Adequate Housing*, *Affordable Housing*, and *Suitable Housing*. Household characteristics include *Household Total After-Tax Income*, *Household Size*, *Number of Household Maintainers*, and *Multigenerational Household Status*.

The *Number of Children (in Household)* and the *Number of Youths (in Household)* could not be included as household characteristics in the analysis because the APS does not collect data on individuals aged younger than 15 years and does not collect data on non-Indigenous household members. Estimates for these variables without this data would lead to undercounting.

Model 3 adds the individual's human capital and labour market characteristics to Model 2. These characteristics include *Highest Level of Schooling* and *Labour Force Status*.

Model 4 adds health characteristics to Model 3. These characteristics include *General Health*, *Mental Health*, *Food Security*, and *Sense of Belonging*. The outcome of interest is not included as a background characteristic for its own analysis. For instance, in the analysis of *General Health, General Health* is excluded as a health characteristic.

Lastly, Model 5 adds geographic characteristics to Model 4. These characteristics include *Region*, *Geographic Setting*, *1-Year Mobility Status*, and *5-Year Mobility Status*.[5]

---

[5] One might suggest that the exclusion of geographic variables could lead to omitted variable bias. The issue with this argument is that existing quantitative research on housing for Indigenous peoples in Canada is limited. This was a clear finding of the Phase I literature review, but it also implies that we have no evidence to rely on that confirms the influence of geography on housing characteristics and conditions (i.e., adequacy, affordability, and suitability). Moreover, the last model specification aids in determining how geography influences the signs, magnitudes, and significance of the effects of housing conditions. The influence from the addition of geography is mixed.

The primary estimation method used is weighted multivariate logistic regression, with the weights based on survey weights provided by Statistics Canada in the microdata. Multivariate logistic regression is an extension of multivariate least squares regression developed for binary responses.

For comparative analysis, the models were also estimated using ordinary least squares (i.e., as linear probability models). The results from ordinary least squares are discussed but not shown.

In all of the model specifications, we use robust standard errors clustered on the census subdivision. This approach is taken, in part, to account for the variation in school attendance that is due to unobserved community-level characteristics, such as investments in school infrastructure.

3.2 General Health

Table 3.2.1 presents the results of the multivariate logistic regression analysis. The results are discussed in terms of odds ratios.

Good mental health is the defining factor behind good general health, and vice-versa. Reporting good mental health is associated with a 984.8% increase in the odds of also reporting good general health. In other terms, compared to those reporting poor mental health, the odds of having good general health are almost 11 times as great.[6] The effect is so great that the magnitude of all other significant effects changes between models that include mental health and those that do not.

Food security matters too, but less so. Indigenous people who are food secure are more likely to report good general health. Being food secure is associated with a significant 136.3 to 136.6% increase in the odds of good general health. Having a sense of belonging is associated with an additional 8.5 to 10.1% increase in the odds. However, the effect of a sense of belonging is significant in neither model specification in which it appears.

There are several other notable patterns. General health is substantially better among homeowners, those with affordable housing, those with adequate housing, and those with a bachelor's degree or higher. General health is lower among those in multigenerational homes. General health also declines with age and improves with income.

Housing security has some marked effects on general health, and to a greater degree than those same effects as seen on mental health in Section 3.2. Indigenous people residing in owned dwellings see the highest odds of good mental health, while those in subsidized rental homes face the lowest odds. Compared to subsidized renters, the odds of reporting good general health are between 44.8 and 121.2% greater for homeowners and between 12.1 and 31.5% greater for non-subsidized renters. The ownership effect is significant across all model specifications, but it is smaller in the fuller model specifications that account for other health outcomes.

As pointed out by Baker et al. (2017), even if the homeownership effect had been small, the population health implications of improving housing tenure amongst Indigenous people could be quite substantial.

---

[6] The point estimate of 2.380 is transformed into an odds ratio (i.e., exp(2.380) – 1 = 9.805).

Nonetheless, policy-makers need to be aware that there may be a differential population health impact for Indigenous women (Hamdullahpur, Jacobs, and Gill 2017).

Adequate, affordable, and suitable housing all have their own effects on general health as well. Those in adequate, affordable, and suitable homes are more likely to enjoy good general health. Each of these aspects about housing quality has its own effect.

The effect of adequate housing is large and consistent across model specifications. Having adequate housing is associated with 59.2 to 77% increase in the odds of good general health, with only a small decrease in effect size after accounting for adjacent health outcomes. The effect of affordable housing is smaller, but still consistent and still significant. Having affordable housing is associated with a 23.2 to 47.7% increase in the odds of good general health, even after accounting for the effect of total household income.

The adequate housing result is in keeping with Ige et al. (2019), who found that housing quality was associated with improved respiratory outcomes, quality of life, and mental health. Still, they could not conclude that the relationship was causal, and that there may be a possibility for reverse causality at play.

Having suitable housing is associated with an increase of between 17.9 and 29.4% in the odds of reporting good general health. Unlike the adequate and affordable housing effects, this effect is larger in fuller model specifications, and only significant in fuller model specifications. These results appear to support the Blau, Haskell and Haurin (2019), who found that crowded living conditions have been linked to respiratory illnesses and stomach infections.

Those in single-detached homes enjoy the highest odds of good general health. The odds of an Indigenous person residing in a single-detached home having good general health are between 55.1 and 87.4% greater than those in other dwellings. These effects are significant across all model specifications.

There are few differences between Indigenous identity groups in terms of perceived general health. Compared to people of First Nation identity, people of Métis and other Indigenous identity have between 0.3 and 17.1% greater odds of good general health, and people of Inuit identity have between 17.0 and 46.2% greater odds. The Inuit identity effect is significant for all model specifications except the sparsest and the most complex ones, and the Métis identity effect is significant for only the sparsest model specification.

Neither an individual's Indigenous citizenship nor registration status have a measurable impact on the odds of good general health. The Indigenous citizenship and registration status effects are never significant.

With each additional year of age, the odds of reporting good general health decreases by a significant 3.2% per year among Indigenous individuals. The effect of sex is unclear, as males see a 14.2% greater odds of good general health in the simplest model specification, but they face a 12% lower odds in the most complex model specification.

Furthermore, every doubling in total household after-tax income is associated with a 4.1 to 7.6% increase in the odds of good general health. Those with at least a bachelor's degree experience the highest odds of good general health, while those without a high school education experience the lowest such odds, and those in between face odds closer to the low end of that range. Those with a bachelor's degree enjoy between

40

a 162.5 and 206.8% increase in health odds compared to those without secondary school completion. Those with secondary school see 27.5 to 33.2% higher odds, those with some post-secondary see 22.1 to 24% higher odds, and completed education below a bachelor's see 27.1 to 38.1% higher odds.

Geographic factors do not appear to be influential with respect to general health. No geographic factors are significant in our results. Also, the addition of geographic factors to the model does not appear to influence the sign, magnitude, and significance of core housing conditions (i.e., adequacy, affordability, and suitability).

In terms of comparative analysis, the results from the ordinary least squares (i.e., linear probability models) agree in sign with the results from the multivariate logistic regression models. In addition, nearly every significant effect in the multivariate logistic regression results is also significant in the ordinary least squares results.

The unadjusted R^2 in ordinary least squares is a measure of how well the independent variables collectively describe the dependent variable. The null model, which considers no variables at all, has an R^2 value of 0; a model that explains changes in perceived general health perfectly would have an R^2 value of 1. However, R^2 always increases as variables are added to a model specification. When we compare the value of R^2 between different model specifications, we can identify which groups of effects are explaining the most about the model.

It is particularly worthwhile to note that the addition of geographic factors does not lead to a large increase in the goodness-of-fit (i.e., R2). This result suggests that geographic factors are not responsible for a substantial portion of the variation in perceived general health.

In our models for perceived general health, the R^2 values for ordinary least squares Models 1 through 5 are 0.033, 0.076, 0.085, 0.263, and 0.264, respectively. The largest increase in R^2 is between Models 3 and 4, implying that the variables added to Model 4 (health outcomes) are the most important effects among those considered. There are more modest increases from the null model to Model 1, and from Model 1 to Model 2, implying that the personal characteristics in Model 1, and the housing characteristics in Model 2 also contribute to our understanding of perceived general health. All of these findings align with those found in the logistic regression analysis.

McFadden's pseudo-R^2 is a deviance-based measure designed to behave like the unadjusted R^2, but it applies to logistic regression models. The R^2 values for logistic Models 1 through 5 are 0.031, 0.073, 0.082, 0.243, and 0.245, respectively. Here, again, we see a large increase at Model 4, and modest increases at Models 1 and 2, further confirming that both sets of models behave similarly.

Table 3.2.1: Individual's Perceived General Health, Indigenous People, 2017 — Part I

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4	Model 5
	(Intercept)	1.998***	-0.710*	-0.654	-1.258***	-1.075*
		(0.092)	(0.346)	(0.350)	(0.351)	(0.446)
Individual Socio-Demographic and Indigenous Characteristics	Age	-0.026***	-0.029***	-0.027***	-0.039***	-0.040***
		(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
	Male	0.133*	0.068	0.105	-0.125*	-0.128*
		(0.054)	(0.054)	(0.055)	(0.060)	(0.060)
	Inuk (Inuit)	0.157	0.326**	0.380***	0.284*	0.221
		(0.099)	(0.110)	(0.113)	(0.143)	(0.139)
	Métis or Other Indigenous	0.158*	0.032	0.046	0.026	0.003
		(0.071)	(0.069)	(0.070)	(0.075)	(0.076)
	Indigenous Citizenship	0.106	0.066	0.053	-0.041	-0.050
		(0.073)	(0.074)	(0.075)	(0.077)	(0.078)
	Registration Status	-0.036	0.051	0.092	0.069	0.081
		(0.090)	(0.090)	(0.090)	(0.092)	(0.093)
	Indigenous Mother Tongue	-0.044	0.309**	0.308**	0.352*	0.323*
		(0.093)	(0.106)	(0.111)	(0.157)	(0.164)
Dwelling and Household Characteristics	Rented (Non-Subsidized)		0.274*	0.228*	0.109	0.114
			(0.107)	(0.108)	(0.120)	(0.119)
	Owned		0.794***	0.679***	0.384***	0.370**
			(0.100)	(0.102)	(0.113)	(0.114)
	Apartment		0.500**	0.395*	0.356*	0.337
			(0.169)	(0.170)	(0.171)	(0.177)
	Semi-Detached		0.398*	0.323	0.186	0.186
			(0.175)	(0.174)	(0.172)	(0.176)
	Single-Detached		0.628***	0.561***	0.439**	0.439**
			(0.163)	(0.162)	(0.159)	(0.159)
	Adequate Housing		0.571***	0.553***	0.471***	0.465***
			(0.090)	(0.090)	(0.102)	(0.103)
	Suitable Housing		0.183	0.165	0.254*	0.258*
			(0.110)	(0.109)	(0.118)	(0.119)
	Affordable Housing		0.390***	0.378***	0.234**	0.209*
			(0.071)	(0.071)	(0.081)	(0.082)
	Total After-Tax Income		0.105***	0.085***	0.057**	0.060**
			(0.023)	(0.022)	(0.022)	(0.021)
	Household Size		-0.054	-0.039	-0.033	-0.035
			(0.028)	(0.028)	(0.030)	(0.030)
	Household Maintainers		0.058	0.052	0.090	0.095
			(0.049)	(0.048)	(0.051)	(0.051)
	Multigenerational Household		-0.447***	-0.412**	-0.459**	-0.457**
			(0.132)	(0.132)	(0.147)	(0.145)

Table 3.2.1: Individual's Perceived General Health, Indigenous People, 2017 — Part II

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4	Model 5
Individual Human Capital Characteristics	Secondary School			0.287**	0.243*	0.262*
				(0.097)	(0.103)	(0.102)
	Some Post-Secondary			0.203*	0.200*	0.215*
				(0.083)	(0.101)	(0.101)
	Below Undergraduate			0.323***	0.240**	0.254**
				(0.080)	(0.092)	(0.092)
	Undergraduate or Above			1.121***	0.965***	0.978***
				(0.112)	(0.115)	(0.113)
Health Characteristics	Sense of Belonging				0.096	0.082
					(0.075)	(0.076)
	Food Secure				0.860***	0.861***
					(0.070)	(0.071)
	Good Mental Health				2.378***	2.380***
					(0.081)	(0.082)
	Deviance	870,235.83	833,197.94	824,284.47	679,899.78	678,519.12
	McFadden (Pseudo) R^2	0.031	0.073	0.082	0.243	0.245
	N	869,730	869,730	869,730	869,730	869,730

Note: The sample is restricted to Canadian-born Indigenous individuals aged 15 years or older residing outside of a reserve. Model 1 includes controls for individual socio-demographic and Indigenous characteristics. Model 2 adds controls for housing and household characteristics. Model 3 adds controls for individual human capital and labour market characteristics. Model 4 adds controls for other health characteristics. Model 5 adds controls for geographic characteristics. Survey weights are used for the analysis. Cluster robust standard errors at the census subdivision level are in parentheses.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

Source: *2017 Aboriginal Peoples Survey* (Statistics Canada 2018)

3.3 Mental Health

Table 3.3.1 presents the results of the multivariate logistic regression analysis. The results are discussed in terms of odds ratios.

Good general health is the defining factor behind good mental health, and vice-versa. Reporting good general health is associated with a 984.8% increase in the odds of also reporting good (or better) mental health. In other terms, compared to those reporting fair or poor general health, the odds of having good mental health are almost 11 times as great.[7] The effect is so great that the magnitude of all other significant effects changes between models that include general health and those that don't.

Other health outcomes matter too, but less so. Indigenous people who are food secure and those with a sense of belonging to their own Indigenous group are more likely to report good mental health. Having food security is associated with a 93.3 to 95% increase in the odds of good mental health, and having a sense of belonging is associated with a 47.7 to 52.0% increase. Both of these effects are significant for both of the model specifications in which these controls appear.

Housing security has some marked effects on mental health, but to a lesser degree than those same effects as seen on general health in Section 3.1. Homeowners see the highest odds of good mental health, while those in subsidized rental homes face the lowest odds. Compared to those in subsidized rental homes, homeowners enjoy 12.7 to 75.8% higher odds of mental health, and those in unsubsidized rental homes enjoy 7.9 to 23.6% higher odds. These effects are larger in sparser model specifications which do not include other health outcomes like general health. The homeowner effect is significant for the two sparser models, and the non-subsidized rental effect is significant for only the sparsest model. It is possible that these effects are overshadowed by the general health effect in the more complex models, and are harder to detect because of it.

The tenure effects identified here do not appear to support the findings of Baker, Bentley, and Mason (2013), who found that renting leads the same individual to have worse mental health over time than owning one's home. In our case, some forms of renting are as good as ownership in terms of good mental health.

Adequate, affordable, and suitable housing all have their own effects on mental health as well. Those in adequate and affordable housing are more likely to enjoy good mental health, and those in suitable housing are less likely to have good mental health, all else being equal. Having adequate housing and affordable housing is associated with a 0.0 to 39.2% and a 6.2 to 35.9% increase in the odds of good mental health, respectively. Like the home tenure effects, these effects are large and significant for the two sparsest models only. Suitable housing works in the opposite direction. Suitable housing is associated with a 14.5 to 24.8% decrease in the odds of good mental health, and this effect is larger in the two more complex model specifications. The suitable housing effect is also only significant in the two most complex model specifications.

---

[7] The point estimate of 2.384 is transformed into an odds ratio (i.e., exp(2.384) – 1 = 9.848).

As found by Pevalin et al. (2017), the negative effects of poor housing persist over time, regardless of current housing conditions. As such, it may be that the negative suitable housing effect identified here may be transitory.

Household composition does not appear to influence mental health status for Indigeous people. The household size and maintainer effects are never significant. As with the case of general health, these results sit in contrast with Blau, Haskell and Haurin (2019), who found that crowded living conditions have been linked to an increase of stress.

Indigenous people residing in multigenerational households do not appear to have any greater or lesser odds of good mental health. The multigenerational household effect is never significant.

There are some differences between Indigenous identity groups in perceived mental health. Compared to those with a First Nation identity, those identifying as Métis or other Indigenous have 0.9% lower to 12.3% higher odds of good mental health, and those with an Inuit identity have 5.2 to 52.7% higher odds of good mental health. The Inuit effect is statistically significant for the three sparser models, the Métis effect is not significant for any model.

Those with Indigenous citizenship report having good mental health more often. Indigenous citizenship is associated with a 8.0 to 24.5% increase in the odds of good mental health. The effect of citizenship is significant for all but the two fullest models. An individual's registration status does not have a measurable impact on the odds of having good mental health.

With each year of age, the odds of reporting good mental health increase by a significant 1.4% per year among Indigenous individuals. Males have between 53.7 and 59.4% higher odds of perceived good mental health. The sex effects are significant for all models.

The effect of income on general health varies from a 1.5% odds decrease to a 4.1% odds increase per doubling, where the larger positive association appears in sparser models and the smaller negative association appears in full models. Also, the addition of geographic factors to the model does not appear to influence the sign, magnitude, and significance of core housing conditions (i.e., adequacy, affordability, and suitability).

Geography plays some role in mental health. The odds of good mental health for those in Quebec, Saskatchewan, and the Territories, are significantly greater than those in other regions. Also, those that did not move in the last year, or only moved within their community enjoy greater odds of good mental health than others. Nevertheless, smaller, offsetting effects were seen when comparing five-year mobility groups, but those were not statistically significant.

In terms of comparative analysis, the results from the ordinary least squares (i.e., linear probability models) agree in sign with the results from the multivariate logistic regression models. In addition, nearly every significant effect in the multivariate logistic regression results is also significant in the ordinary least squares results.

The unadjusted R^2 in ordinary least squares is a measure of how well the independent variables collectively describe the dependent variable. The null model, which considers no variables at all, has an R^2 value of 0;

45

a model that explains changes in perceived general health perfectly would have an R^2 value of 1. However, R^2 always increases as variables are added to a model specification. When we compare the value of R^2 between different model specifications, we can identify which groups of effects are explaining the most about the model.

As was the case for general health, it is worthwhile to note that the addition of geographic factors does not lead to a large increase in the goodness-of-fit (i.e., R2). This result suggests that geographic factors are not responsible for a substantial portion of the variation in perceived mental health.

In our models of perceived mental health, the R^2 values for ordinary least squares Models 1 through 5 are 0.023, 0.039, 0.043, 0.224, and 0.227, respectively. The largest increase in R^2 is between Models 3 and 4, implying that the variables added to Model 4 (health outcomes) are the most important effects in understanding perceived mental health. This finding aligns with those found in the logistic regression analysis.

McFadden's pseudo-R^2 is a deviance-based measure designed to behave like the unadjusted R^2, but it applies to logistic regression models. The R^2 values for logistic Models 1 through 5 are 0.026, 0.044, 0.048, 0.231, and 0.235, respectively. Here, again, we see a large increase at Model 4, further confirming that both sets of models behave similarly.

Table 3.3.1: Individual's Perceived Mental Health, 2017 – Part I

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4	Model 5
	(Intercept)	0.713***	-0.759*	-0.972**	-1.810***	-2.324***
		(0.101)	(0.315)	(0.323)	(0.384)	(0.436)
Individual Socio-Demographic and Indigenous Characteristics	Age	0.009***	0.009***	0.010***	0.026***	0.025***
		(0.002)	(0.002)	(0.002)	(0.003)	(0.003)
	Male	0.466***	0.430***	0.465***	0.440***	0.432***
		(0.055)	(0.056)	(0.056)	(0.061)	(0.061)
	Inuk (Inuit)	0.416**	0.403**	0.423**	0.238	0.051
		(0.142)	(0.154)	(0.155)	(0.181)	(0.170)
	Métis or Other Indigenous	0.116	0.032	0.031	-0.000	-0.009
		(0.071)	(0.070)	(0.070)	(0.077)	(0.079)
	Indigenous Citizenship	0.219**	0.179*	0.168*	0.078	0.077
		(0.075)	(0.077)	(0.078)	(0.082)	(0.081)
	Registration Status	-0.013	0.045	0.071	-0.003	0.007
		(0.093)	(0.095)	(0.095)	(0.101)	(0.098)
	Indigenous Mother Tongue	0.136	0.298	0.308	0.174	0.140
		(0.172)	(0.178)	(0.181)	(0.214)	(0.218)
Dwelling and Household Characteristics	Rented (Non-Subsidized)		0.212*	0.181	0.052	0.076
			(0.103)	(0.103)	(0.111)	(0.114)
	Owned		0.564***	0.501***	0.120	0.156
			(0.123)	(0.121)	(0.136)	(0.143)
	Apartment		0.221	0.156	-0.097	-0.056
			(0.198)	(0.196)	(0.206)	(0.217)
	Semi-Detached		0.299	0.257	0.012	0.080
			(0.201)	(0.199)	(0.204)	(0.216)
	Single-Detached		0.428*	0.386*	0.044	0.066
			(0.183)	(0.181)	(0.186)	(0.187)
	Adequate Housing		0.331***	0.307***	0.002	0.000
			(0.087)	(0.087)	(0.106)	(0.107)
	Suitable Housing		-0.157	-0.175	-0.285*	-0.280*
			(0.097)	(0.097)	(0.111)	(0.116)
	Affordable Housing		0.291***	0.275***	0.071	0.060
			(0.074)	(0.075)	(0.095)	(0.096)
	Total After-Tax Income		0.057**	0.045*	-0.021	-0.016
			(0.019)	(0.020)	(0.031)	(0.030)
	Household Size		-0.013	-0.002	0.038	0.039
			(0.029)	(0.029)	(0.033)	(0.032)
	Household Maintainers		-0.043	-0.046	-0.088	-0.080
			(0.046)	(0.045)	(0.052)	(0.052)
	Multigenerational Household		-0.057	-0.040	0.192	0.193
			(0.131)	(0.133)	(0.152)	(0.153)

Table 3.3.1: Individual's Perceived Mental Health, 2017 – Part I

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4	Model 5
Individual Human Capital Characteristics	Secondary School			0.149	-0.001	-0.002
				(0.121)	(0.127)	(0.126)
	Some Post-Secondary			0.052	-0.095	-0.094
				(0.098)	(0.116)	(0.118)
	Below Undergraduate			0.207*	0.001	-0.011
				(0.102)	(0.112)	(0.115)
	Undergraduate or Above			0.523***	-0.034	-0.044
				(0.144)	(0.157)	(0.156)
Health Characteristics	Sense of Belonging				0.419***	0.390***
					(0.081)	(0.079)
	Food Secure				0.659***	0.668***
					(0.071)	(0.072)
	Good General Health				2.384***	2.384***
					(0.082)	(0.083)
	Deviance	740,384.28	726,701.29	723,723.90	584,992.20	581,874.78
	McFadden (Pseudo) R^2	0.026	0.044	0.048	0.231	0.235
	N	869,730	869,730	869,730	869,730	869,730

Note: The sample is restricted to Canadian-born Indigenous individuals aged 15 years or older residing outside of a reserve. Model 1 includes controls for individual socio-demographic and Indigenous characteristics. Model 2 adds controls for housing and household characteristics. Model 3 adds controls for individual human capital and labour market characteristics. Model 4 adds controls for other health characteristics. Model 5 adds controls for geographic characteristics. Survey weights are used for the analysis. Cluster robust standard errors at the census subdivision level are in parentheses.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

Source: *2017 Aboriginal Peoples Survey* (Statistics Canada 2018)

3.4 Food Security

Table 3.4.1 presents the results of the multivariate logistic regression analysis. The results are discussed in terms of odds ratios.

Housing is the defining factor in predicting food security. All else being equal, Indigenous people residing in owned dwellings are much more likely to be food secure than those residing in non-subsidized rentals, who are more likely to be food secure than those residing in subsidized rentals. Compared to those in subsidized rentals, homeowners enjoy 204.7 to 285.0% greater odds of food security, and those in unsubsidized rentals enjoy 50.1 and 65.5% greater odds.[8] These effects are significant for all models in which they appear, but are smaller in magnitude in sparser models.

Holding all other variables constant, Indigenous people residing in affordable, adequate, and suitable homes are more food secure than those in unaffordable, inadequate, and unsuitable homes, respectively. Every aspect of housing that we measured has a significant association with food security. Those in affordable homes enjoyed a 60.3 to 68.0% increase in the odds of food security than those without affordable homes. Similarly, those in adequate homes enjoyed a 47.3 to 64.7% increase, and those in suitable homes enjoyed a more modest 21.3 to 27.1% increase. All of these effects are significant for all model specifications.

Those in apartments, semi-detached, and single-detached dwellings, are all more food secure than those in other types of dwellings. Being in a semi-detached home is associated with the highest odds of food security. As compared to those residing in other dwelling types, the odds of being food secure are between 35.3 and 86.5% greater for those residing in apartments, 57.8 to 96.8% greater for those residing in semi-detached dwellings, and 53.1 to 89.5% greater for those in single-detached dwellings.

Those living in multigenerational homes report less food security, but this effect is much smaller than other housing effects. Being in a multigenerational household is associated with a 15.3 to 23.6% reduction in the odds of food security, but this effect is only significant in the sparsest model specification in which it appears.

Inuit are the least likely to be food secure among Indigenous identity groups, and Métis are the most likely to be food secure. Those with an Inuit identity have between 17.9 and 39.1% lower odds of food security than First Nation individuals. Métis individuals have 9.4 to 33.1% higher odds of food security. The Inuit effect is significant in all but the fullest model specification, and the Métis effect is only significant in the sparsest model.

Having an Indigenous mother tongue is associated with a sharp decrease in food security. Those that speak an Indigenous language as their mother tongue face 50.3 to 66.8% lower odds of being food secure. This effect is significant in all models.

Individuals with Indigenous citizenship are more likely to be food secure, and they have 8.2 to 17.5% higher odds of food security. Those with registration status have odds of food security that are between 15.6%

---

[8] The point estimate of 1.114 is transformed into an odds ratio (i.e., exp(1.114) – 1 = 2.047).

lower and 1.9% higher. Both the citizenship and registration status effects are only significant for the sparsest model specification.

With each year of age, the odds of food security increase by a significant 0.7%, and Males have 20.8 to 31.4% higher odds of food security. There is no pattern of increasing or decreasing effect size with model complexity for either sex or age. The effect of sex is significant for all models.

Other health outcomes also play a role. Those reporting good mental health and good general health are more food secure than those reporting poor health in either aspect. Those with a sense of belonging to their community report less food security, but this effect, while significant, is much smaller than that of general and mental health. Those reporting good general and mental health have 130.9 to 131.4% and 91.7 to 92.9% higher odds of food security, respectively. These reporting a sense of belonging have between 25.0 and 25.1% lower odds of food security. Keep in mind that a sense of belonging is associated with many other variables, as shown in Section 3.4, which could affect this effect estimate.

Food security increases greatly with income and education level. The odds of food security increase at a rate of 15.% to 21.9% per doubling in total household after tax income. Food security also increases with educational attainment. Compared with those without a secondary school education, the odds of food security are between 27.3 and 33.9% greater among secondary school graduates, between 34.6 and 41.2% greater among those with some post-secondary education, between 45.6 and 58.1% greater among those with a completed program less than a bachelor's, and between 179.3 and 237% greater among those with a bachelor's degree or higher.

Geography appears to have some influence over food security. Adjusting for all other factors, those residing in the Atlantic region in semi-rural areas face the lowest odds of being food secure. However, the addition of geographic factors to the model does not appear to influence the sign, magnitude, and significance of core housing conditions (i.e., adequacy, affordability, and suitability).

The McFadden's pseudo-R^2 increases from 6.5% in Model 1 to 20.3% in Model 5. We would expect this model fit measure to increase this way because each model is constructed by adding variables to the previous one. The largest jump in the R^2 measure is between Models 1 and 2. This jump implies that the housing characteristics (added in Model 2), and the adjacent health outcomes (added in Model 4) explain a large part of the variation in the food security.

In terms of comparative analysis, the results from the ordinary least squares (i.e., linear probability models) agree in sign with the results from the multivariate logistic regression models. In addition, nearly every significant effect in the multivariate logistic regression results is also significant in the ordinary least squares results.

The unadjusted R^2 in ordinary least squares is a measure of how well the independent variables collectively describe the dependent variable. The null model, which considers no variables at all, has an R^2 value of 0; a model that explains changes in perceived general health perfectly would have an R^2 value of 1. However, R^2 always increases as variables are added to a model specification. When we compare the value of R^2 between different model specifications, we can identify which groups of effects are explaining the most about the model.

As was the case for general and mental health, it is worthwhile to note that the addition of geographic factors does not lead to a large increase in the goodness-of-fit (i.e., R2). This result suggests that geographic factors are not responsible for a substantial portion of the variation in perceived food security.

In our models of food security, the R^2 values for ordinary least squares Models 1 through 5 are 0.083, 0.184, 0.203, 0.243, and 0.246 respectively. The largest increase in R^2 is between Models 1 and 2, implying that the variables added to Model 2 (housing characteristics) are the most important effects among those considered. There is a modest increase from the Models 3 to 4, implying that the health outcomes in Model 4 also contribute to our understanding of food security. Both of these findings align with those found in the logistic regression analysis.

McFadden's pseudo-R^2 is a deviance-based measure designed to behave like the unadjusted R^2, but it applies to logistic regression models. The R^2 values for logistic Models 1 through 5 are 0.065, 0.147, 0.164, 0.200, and 0.203, respectively. Here, again, we see an increase at Model 4, and modest increase at Model 2, further confirming that both sets of models behave similarly.

Table 3.4.1: Individual's Food Security, 2017 – Part I

Category	Level	Model 1	Model 2	Model 3	Model 4	Model 5
	(Intercept)	-0.185*	-5.210***	-5.548***	-6.181***	-5.856***
		(0.075)	(0.739)	(0.584)	(0.510)	(0.519)
Individual Socio-Demographic and Indigenous Characteristics	Age	0.006***	0.004	0.005*	0.010***	0.009***
		(0.002)	(0.002)	(0.002)	(0.002)	(0.003)
	Male	0.258***	0.189***	0.273***	0.242***	0.234***
		(0.046)	(0.047)	(0.048)	(0.051)	(0.051)
	Inuk (Inuit)	-0.496***	-0.364***	-0.298**	-0.318**	-0.197
		(0.113)	(0.108)	(0.107)	(0.110)	(0.123)
	Métis or Other Indigenous	0.286***	0.100	0.106	0.090	0.092
		(0.058)	(0.060)	(0.060)	(0.062)	(0.063)
	Indigenous Citizenship	0.161*	0.100	0.079	0.112	0.128
		(0.066)	(0.070)	(0.072)	(0.072)	(0.072)
	Registration Status	-0.170*	-0.044	0.013	0.012	0.019
		(0.077)	(0.075)	(0.075)	(0.077)	(0.077)
	Indigenous Mother Tongue	-1.104***	-0.700***	-0.702***	-0.746***	-0.737***
		(0.095)	(0.107)	(0.113)	(0.113)	(0.112)
Dwelling and Household Characteristics	Rented (Unsubsidized)		0.510***	0.461***	0.406***	0.416***
			(0.091)	(0.090)	(0.093)	(0.097)
	Owned		1.348***	1.242***	1.137***	1.114***
			(0.094)	(0.088)	(0.091)	(0.095)
	Apartment		0.623***	0.472**	0.419*	0.302
			(0.154)	(0.155)	(0.170)	(0.173)
	Semi-Detached		0.677***	0.582***	0.546**	0.456**
			(0.159)	(0.159)	(0.174)	(0.176)
	Single-Detached		0.639***	0.552***	0.474**	0.426**
			(0.142)	(0.142)	(0.155)	(0.156)
	Adequate Housing		0.499***	0.469***	0.381***	0.387***
			(0.081)	(0.083)	(0.082)	(0.083)
	Suitable Housing		0.240*	0.207*	0.193*	0.193*
			(0.094)	(0.094)	(0.093)	(0.095)
	Affordable Housing		0.510***	0.519***	0.472***	0.476***
			(0.092)	(0.083)	(0.079)	(0.078)
	Total After-Tax Income		0.286***	0.229***	0.207***	0.202***
			(0.076)	(0.057)	(0.047)	(0.045)
	Household Size		-0.124***	-0.099***	-0.093***	-0.098***
			(0.028)	(0.028)	(0.028)	(0.028)
	Household Maintainers		0.047	0.037	0.038	0.027
			(0.038)	(0.039)	(0.039)	(0.038)
	Multigenerational Household		-0.269*	-0.233	-0.175	-0.166
			(0.123)	(0.127)	(0.134)	(0.134)

Table 3.4.1: Individual's Food Security, 2017 – Part II

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4	Model 5
Individual Human Capital Characteristics	Secondary School			0.292***	0.241***	0.243***
				(0.076)	(0.083)	(0.085)
	Some Post-Secondary			0.345***	0.309**	0.297**
				(0.088)	(0.095)	(0.095)
	Below Undergraduate			0.458***	0.385***	0.376***
				(0.074)	(0.077)	(0.077)
	Undergraduate or Above			1.215***	1.051***	1.027***
				(0.108)	(0.104)	(0.107)
Health Characteristics	Sense of Belonging				-0.289***	-0.288***
					(0.058)	(0.058)
	Good General Health				0.839***	0.837***
					(0.070)	(0.070)
	Good Mental Health				0.651***	0.657***
					(0.070)	(0.071)
	Deviance	1,063,276.03	970,452.25	950,465.57	910,394.09	906,661.37
	McFadden (Pseudo) R^2	0.065	0.147	0.164	0.200	0.203
	N	869,730	869,730	869,730	869,730	869,730

Note: The sample is restricted to Canadian-born Indigenous individuals aged 15 years or older residing outside of a reserve. Model 1 includes controls for individual socio-demographic and Indigenous characteristics. Model 2 adds controls for housing and household characteristics. Model 3 adds controls for individual human capital and labour market characteristics. Model 4 adds controls for other health characteristics. Model 5 adds controls for geographic characteristics. Survey weights are used for the analysis. Cluster robust standard errors at the census subdivision level are in parentheses.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

Source: *2017 Aboriginal Peoples Survey* (Statistics Canada 2018)

3.5 Sense of Belonging

Table 3.5.1 presents the results of the multivariate logistic regression analysis. The results are discussed in terms of odds ratios.

There are large differences in the odds of sense of belonging between different Indigenous identity groups. Those identifying as Inuit are the most likely to report a sense of belonging, and those with Métis and other Indigenous identities have the lowest odds. Compared to First Nation individuals, Inuit individuals have between 178.4 and 338.9% higher odds, and Métis and other Indigenous have between 22.4 and 24.6% lower odds of reporting a sense of belonging to their community, respectively.[9] All of these differences are significant for every model specification. The difference between Inuit and First Nation individuals gets smaller as the model gets fuller, but the Métis – First Nation difference is consistent.

Those with Indigenous citizenship are much more likely to have a sense of belonging than non-citizens. Those with registration status are also more likely to have a sense of belonging. Those with an Indigenous mother tongue also have much higher odds of a sense of belonging. Being an Indigenous citizen is associated with a 133.5 to 142.3% increase in the odds of a sense of belonging, as compared to Indigenous individuals without citizenship. Similarly, those with registration status see a 36.9 to 44.9% odds increase and those that have an Indigenous mother tongue see a 113.6 to 195.6% odds increase. All of these effects are significant for all model specifications. The effect of having an Indigenous mother tongue is smaller in fuller models, but the citizenship and registration effects are consistent across all models.

It should be emphasized here that each of these effects is multiplicative in their effects on the odds. An Inuit individual with an Indigenous mother tongue has an estimated 5.95 to 12.97 times the odds of having a sense of belonging as a First Nation individual without an Indigenous mother tongue.

Having a sense of belonging becomes more likely with age, and males are more likely to report a sense of belonging than females. For each additional year of age, the odds of having a sense of belonging increase by a significant 2.3% per year. The odds for male individuals reporting a sense of belonging are 24.5 to 30.9% higher. Both of these effects are significant for all model specifications.

There are some small effects related to housing characteristics and conditions. Residing in an owned dwelling, residing in an unsubsidized rental, and having suitable housing are all associated with lower odds of a sense of belonging, but each of these effects is small compared to the demographic- and language-related differences. Compared to subsidized renters, homeowners have a 30.0 to 37.1% lower odds of having a sense of belonging, while unsubsidized renters have 19.6 to 26.7% lower odds of having a sense of belonging. There is no measurable effect of living in a multigenerational household on having a sense of belonging, holding all other model variables equal. The difference between subsidized renters and homeowners is significant for all model specifications.

The odds of a sense of belonging decrease with increasing education. Compared to those without secondary school, those with secondary school have between 4.7 and 9.4% lower odds, those with second post-secondary have between 12.5 and 16.6% lower odds, those with a completed program below a bachelor's

---

[9] The point estimate of 1.024 is transformed into an odds ratio (i.e., exp(1.024) – 1 = 1.784).

have between 27.4 and 29.2% lower odds, and those with a bachelor's degree or higher have between 33.9 and 36.6% lower odds of having a sense of belonging, respectively. These effects are significant for all model specifications that include education level. There is no statistically significant effect of income on a sense of belonging.

There are some associations between a sense of belonging and other health outcomes. Those with food security have between 25.4 and 25.6% lower odds, and those with good mental health have between 48.7 and 52.8% higher odds of a sense of belonging. Both of these effects are significant in model specifications that include them. There is no statistically significant association between general health and a sense of belonging.

In terms of comparative analysis, the results from the ordinary least squares (i.e., linear probability models) agree in sign with the results from the multivariate logistic regression models. In addition, nearly every significant effect in the multivariate logistic regression results is also significant in the ordinary least squares results.

In this case, the addition of geographic factors to the model does appear to have influence over the magnitude and significance of some core housing conditions. Those in Quebec, the Territories, the Atlantic region, and Saskatchewan have the greatest odds of being food secure in decreasing order, while those in semi-rural and urban settings have the lowest odds of being food secure.

The addition of geographic factors does appear to influence the magnitude and significance of other housing conditions. The already decreased odds of being food secure associated with affordable housing falls by an additional 5 percentage points. The affordable housing effect also becomes significant.

The unadjusted R^2 in ordinary least squares is a measure of how well the independent variables collectively describe the dependent variable. The null model, which considers no variables at all, has an R^2 value of 0; a model that explains changes in perceived general health perfectly would have an R^2 value of 1. However, R^2 always increases as variables are added to a model specification. When we compare the value of R^2 between different model specifications, we can identify which groups of effects are explaining the most about the model.

As was the case for other health outcomes, it is worthwhile to note that the addition of geographic factors does not lead to a large increase in the goodness-of-fit (i.e., R2). This result suggests that geographic factors are not responsible for a substantial portion of the variation in sense of belonging.

In our models of sense of belonging, the R^2 values for ordinary least squares Models 1 through 5 are 0.121, 0.128, 0.132, 0.138, and 0.150, respectively. The largest increase in R^2 is between the null model and Model 1, implying that the variables added to Model 1 (personal characteristics) are the most important effects among those considered in understanding differences in people's sense of belonging.

McFadden's pseudo-R^2 is a deviance-based measure designed to behave like the unadjusted R^2, but it applies to logistic regression models. The R^2 values for logistic Models 1 through 5 are 0.096, 0.101, 0.105, 0.110, and 0.120, respectively. Here, again, we see a large increase at Model 1, and lack of major increases anywhere else, further confirming that both sets of models behave similarly.

Table 3.5.1: Individual's Sense of Belonging, 2017 – Part I

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4	Model 5
	(Intercept)	-1.071***	-0.090	0.024	-0.371	-0.288
		(0.091)	(0.370)	(0.378)	(0.381)	(0.412)
Individual Socio-Demographic and Indigenous Characteristics	Age	0.023***	0.024***	0.024***	0.024***	0.024***
		(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
	Male	0.253***	0.269***	0.238***	0.228***	0.219***
		(0.049)	(0.049)	(0.050)	(0.050)	(0.051)
	Inuk (Inuit)	1.479***	1.353***	1.329***	1.297***	1.024***
		(0.148)	(0.152)	(0.153)	(0.152)	(0.147)
	Métis or Other Indigenous	-0.283****	-0.254***	-0.258***	-0.258***	-0.263***
		(0.056)	(0.057)	(0.058)	(0.059)	(0.058)
	Indigenous Citizenship	0.848***	0.850***	0.872***	0.874***	0.885***
		(0.054)	(0.053)	(0.053)	(0.053)	(0.053)
	Registration Status	0.371***	0.345***	0.317***	0.314***	0.335***
		(0.066)	(0.065)	(0.065)	(0.066)	(0.067)
	Indigenous Mother Tongue	1.084***	0.913***	0.909***	0.845***	0.759***
		(0.216)	(0.203)	(0.202)	(0.199)	(0.197)
Housing Characteristics	Rented (Non-Subsidized)		-0.311***	-0.276***	-0.265***	-0.218***
			(0.113)	(0.113)	(0.116)	(0.116)
	Owned		-0.464***	-0.390**	-0.356**	-0.365**
			(0.120)	(0.121)	(0.123)	(0.127)
	Apartment		-0.154	-0.083	-0.068	-0.033
			(0.163)	(0.166)	(0.163)	(0.167)
	Semi-Detached		-0.074	-0.024	-0.006	0.068
			(0.159)	(0.160)	(0.158)	(0.167)
	Single-Detached		0.105	0.153	0.160	0.135
			(0.142)	(0.144)	(0.141)	(0.147)
	Adequate Housing		-0.021	-0.006	-0.006	0.006
			(0.089)	(0.088)	(0.090)	(0.091)
	Suitable Housing		-0.285**	-0.274**	-0.257*	-0.261*
			(0.104)	(0.104)	(0.104)	(0.105)
	Affordable Housing		-0.126	-0.116	-0.104	-0.167*
			(0.088)	(0.087)	(0.088)	(0.084)
	Total After-Tax Income		-0.044	-0.027	-0.019	-0.004
			(0.030)	(0.028)	(0.028)	(0.025)
	Household Size		0.037	0.026	0.021	0.018
			(0.020)	(0.020)	(0.020)	(0.021)
	Household Maintainers		0.015	0.021	0.025	0.040
			(0.038)	(0.038)	(0.038)	(0.038)
	Multigenerational Household		0.036	0.007	0.001	0.045
			(0.084)	(0.084)	(0.084)	(0.084)

Table 3.5.1: Individual's Sense of Belonging, 2017 – Part II

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4	Model 5
Human Capital Characteristics	Secondary School			-0.099	-0.095	-0.048
				(0.094)	(0.094)	(0.094)
	Some Post-Secondary			-0.181[*]	-0.167[*]	-0.133
				(0.081)	(0.082)	(0.083)
	Below Undergraduate			-0.345[***]	-0.336[***]	-0.320[***]
				(0.080)	(0.081)	(0.082)
	Undergraduate or Above			-0.455[***]	-0.438[***]	-0.414[***]
				(0.100)	(0.103)	(0.109)
Health Characteristics	Food Secure				-0.296[***]	-0.293[***]
					(0.058)	(0.058)
	General Health				0.092	0.079
					(0.074)	(0.075)
	Mental Health				0.424[***]	0.397[***]
					(0.081)	(0.079)
	Deviance	1,062,663.68	1,056,283.17	1,052,058.07	1,045,462.47	1,033,964.66
	McFadden (Pseudo) R^2	0.096	0.101	0.105	0.110	0.120
	N	869,730	869,730	869,730	869,730	869,730

Note: The sample is restricted to Canadian-born Indigenous individuals aged 15 years or older residing outside of a reserve. Model 1 includes controls for individual socio-demographic and Indigenous characteristics. Model 2 adds controls for housing and household characteristics. Model 3 adds controls for individual human capital and labour market characteristics. Model 4 adds controls for other health characteristics. Model 5 adds controls for geographic characteristics. Survey weights are used for the analysis. Cluster robust standard errors at the census subdivision level are in parentheses.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

Source: *2017 Aboriginal Peoples Survey* (Statistics Canada 2018)

4.0 Education

Key Findings

- School attendance and completion systematically differ between Indigenous and non-Indigenous youth, especially in terms of dwelling and household factors.
- Older Indigenous youths and male Indigenous youths are less likely to attend school.
- Indigenous youth with a male primary household maintainer are less likely to attend school.
- The age of the primary household maintainer is not a significant factor in the school attendance decision for Indigenous youth but it is for non-Indigenous youth.
- Neither a youth's Indigenous citizenship nor registration status have a measurable impact on the odds of school attendance.
- For Indigenous youth, homeownership and housing suitability have a positive influence on school attendance, while residing in a multigenerational household has a negative influence. These effects are stronger than the corresponding effects for their non-Indigenous peers.
- Housing adequacy and affordability do not appear to influence school attendance for Indigenous youth. In contrast, these factors appear to be positively associated with school attendance for non-Indigenous youth.
- School attendance for Indigenous youth grows as the number of similar-aged youth in the home rises.
- As household income rises, the odds of Indigenous youth attending school also rises. This income effect is larger for Indigenous youth than for non-Indigenous youth.
- The likelihood of attending school rises for Indigenous youth with greater levels of education attainment by the primary household maintainer.
- Inuit youth are substantially less likely to complete school, relative to their First Nations peers.
- There is some evidence that Métis and other Indigenous youth are slightly more likely to complete school than First Nations youth.
- Indigenous citizenship appears to have a negative effect on school completion, while registration status appears to have no effect.
- The likelihood of completing school rises as Indigenous youth move into more secure forms of housing tenure (i.e., from subsidized rentals to non-subsidized rented and owned dwellings).
- Residing in single-detached dwellings is not as positively influential on school completion for Indigenous youth as is the case for non-Indigenous youth.
- Housing adequacy, suitability, and affordability are not significant determining factors in terms of school completion for Indigenous youth.
- Indigenous youth do not appear to be influenced towards or against completing school by residing in multigenerational households.

- Household composition factors are not associated with school completion for Indigenous youth.
- As household income rises, the odds of Indigenous youth completing school also rises. This income effect is larger for Indigenous youth than for non-Indigenous youth.
- School completion for Indigenous youth positively influenced by their primary household maintainer's education attainment.

The following list presents the background characteristics as indicated by the literature review that explain school outcomes (i.e., school attendance and school completion) for youth aged 15 to 18 years. These characteristics are broken down by category.

Youth Socio-Demographic and Indigenous Characteristics:
- Sex
- Age
- Indigenous identity group
- Indigenous citizenship
- Registration status

Dwelling and Household Characteristics:
- Housing tenure
- Dwelling type
- Adequacy
- Affordability
- Suitability
- Household income
- Household size
- Number of children in the household aged 0 to 18 years
- Number of youths in the household aged 15 to 18 years
- Number of household maintainers
- Multigenerational household status

Primary Household Maintainer Socio-Demographic and Indigenous Characteristics:
- Sex
- Age
- Marital status
- Indigenous identity group
- Indigenous citizenship
- Registration status

Primary Household Maintainer Human Capital and Labour Market Characteristics:
- Highest level of schooling
- Labour force status
- Full-time work status
- Industry of employment

Geographic Characteristics:
- Province / territory
- Geographic setting
- 1-year mobility status
- 5-year mobility status

4.1 Education Data Sources and Analysis

We use two samples based on the Census for the analysis of two school outcomes: *School Attendance* and *School Completion*. The first is restricted to Canadian-born, Indigenous youth aged 15 to 18 years that resided outside of a reserve with a primary household maintainer aged 19 years or older. The second sample, which is larger than the first, uses the same conditions but also includes non-Indigenous youth.

Comparing the results of the analysis between these two samples allows us to identify systematic differences between Indigenous and non-Indigenous youth in terms of the influence of multiple factors on school outcomes. The idea here is that the differences between the two sets of results are driven by the exclusion or inclusion of non-Indigenous youth within the samples.

The datasets available for this report are not rich enough to study the impact of dwelling and household characteristics on school completion for young adults (i.e., those aged 19 to 24 years). That type of analysis would most likely rely on longitudinal data.

We use five model specifications to analyze the simultaneous influence of multiple factors on each of the school outcomes. Model 1 examines the influence of the youth's socio-demographic and Indigenous characteristics. Model 1 examines the influence of the individual's socio-demographic and Indigenous characteristics. This model controls for *Age*, *Sex*, *Marital Status*, *Indigenous Identity Group*, *Indigenous Citizenship*, and *Registration Status*.

Model 2 builds on the first model by also examining the influence of dwelling and household characteristics. Dwelling characteristics include *Tenure*, *Dwelling Type*, *Adequate Housing*, *Affordable Housing*, and *Suitable Housing*. Household characteristics include *Household Total After-Tax Income*, *Household Size*, *Number of Children (in Household)*, *Number of Youths (in Household)*, *Number of Household Maintainers*, and *Multigenerational Household Status*.

Model 3 adds the primary household maintainer's socio-demographic and Indigenous characteristics to Model 2. These characteristics include the same characteristics as for the youth in Model 1 (i.e., *Age*, *Sex*, *Indigenous Identity Group*, *Indigenous Citizenship*, and *Registration Status*), along with the primary household maintainer's *Marital Status*.

Model 4 adds the primary household maintainer's human capital and labour market characteristics to Model 3. These characteristics include *Highest Level of Schooling*, *Labour Force Status*, *Full-Time Status*, and *Industry of Employment*.

Lastly, Model 5 adds geographic characteristics to Model 4. These characteristics include *Region*, *Geographic Setting*, *1-Year Mobility Status*, and *5-Year Mobility Status*.
With the exception of *Indigenous Identity Group*, the controls are defined the same for each sample. Non-Indigenous identity is not defined for the sample with Indigenous youth alone.

The primary estimation method used is weighted multivariate logistic regression, with the weights based on survey weights provided by Statistics Canada in the microdata. Multivariate logistic regression is an extension of multivariate least squares regression developed for binary responses.

For comparative analysis, the models were also estimated using ordinary least squares (i.e., as linear probability models). The results from ordinary least squares are discussed but not shown.

In all of the model specifications, we use robust standard errors clustered on the census subdivision. This approach is taken, in part, to account for the variation in school attendance that is due to unobserved community-level characteristics, such as investments in school infrastructure.

4.2 School Attendance

Table 4.2.1 presents the results of the multivariate logistic regression analysis for the sample restricted to Indigenous youth alone. Table 4.2.2 presents the corresponding results for the larger sample that includes both Indigenous and non-Indigenous youth. The results are discussed in terms of odds ratios.

The results suggest that the school attendance decision systematically differs both as a whole and in terms of dwelling and household factors between Indigenous and non-Indigenous youth. These findings, along with their policy implications, are highlighted by a comparison of the results from the two samples.

Older youths and male youths are less likely to attend school regardless of Indigenous identity status. However, the effect of age is larger and the effect of being a male is smaller for Indigenous youth. Each additional year of age leads to a decreased odds of school attendance of 37.2% for Indigenous youth but only 30.9% for the larger sample that includes non-Indigenous youth.[10] Being a male, on the other hand, leads to a decreased odds of only 8.3% for Indigenous youth and a nearly double 17.5% for both Indigenous and non-Indigenous youth. Age and sex are significant in every model specification.

Having a male primary household maintainer appears to compound the negative influences of age and being a male for both Indigenous and non-Indigenous youth. The odds of attending school for Indigenous youth with a male primary household maintainer are between 6.9 and 12.9% lower, while the corresponding odds averaged across Indigenous and non-Indigenous youth are between 6.0 and 15.0% lower. The male primary household maintainer effect is only significant in one model in the restricted sample but always significant in the larger sample.

The age of the primary household maintainer is not a significant factor for Indigenous youth but it is for non-Indigenous youth. While the primary household maintainer age effects are always positive in the restricted sample, these effects are never significant. In contrast, the primary household maintainer age effect is always positive and significant in the larger sample. The odds of attending school are between 0.5 and 0.9% greater for each year of primary household maintainer age when averaged across Indigenous and non-Indigenous youth.

The effects for Indigenous identity groups reveals that Inuit and Métis youth are substantially less likely to attend school relative to both their First Nations and non-Indigenous peers. The odds of an Inuit youth attending school are between 14.0 and 57.4% lower in the restricted sample and between 26.9 and 56.9% lower in the larger sample. In addition, having an Inuit primary household maintainer is associated with a

---

[10] The point estimate of –0.469 is transformed into an odds ratio (i.e., exp(–0.469) – 1 = –0.374).

34.1 to 38.8% decreased odds of school attendance in the restricted sample and a 22.9 to 29.7% decreased odds of school attendance in the larger sample. Although the Inuit youth effects are only significant in a few of the restricted sample model specifications, they are significant in every specification of the larger sample. The Inuit primary household maintainer effects are only significant in the restricted sample.

The odds of school attendance for Métis or other Indigenous youth are between 9.2 and 15.0% lower in the restricted sample and a very similar 9.9 to 15.6% lower in the larger sample. In contrast to the case of Inuit primary household maintainers, having a Métis or Other Indigenous primary household maintainer does not appear to influence school attendance. The Métis or Other Indigenous youth effects are significant for three out of five models, while the Métis or Other Indigenous primary household maintainer effects are never significant.

Intriguingly, the odds of attending school for non-Indigenous youth falls from being strongly greater than First Nations youth and highly significant to slightly lower than First Nations youth and insignificant as we move from the sparsest to the more complex model specifications. This result could be indicating that the richer specifications are accounting for most of the variation in school attendance for First Nations and non-Indigenous youth, but that additional controls are required for Inuit and Métis youth.

Neither a youth's Indigenous citizenship nor registration status have a measurable impact on the odds of school attendance. The same is true regarding the youth's primary household maintainer's Indigenous citizenship and registration status. The Indigenous citizenship and registration effects are never significant in any of the specifications or samples.

Homeownership and housing suitability have a stronger influence on school attendance for Indigenous youth relative to their non-Indigenous peers. The odds of attending school are between 25.6 and 46.4% greater for Indigenous youth residing in owned dwellings over subsidized dwellings. These odds drop to between 8.3 and 34.9% greater when the sample includes non-Indigenous youth. Similarly, the odds of attending school are between 29.3 and 33.5% greater for Indigenous youth in suitable over non-suitable housing but only between 15.1 and 20.8% greater when considering both Indigenous and non-Indigenous youth.[11] The owned dwelling effect is always significant in the restricted sample and only insignificant for the most complex model in the larger sample. Housing suitability is always significant. The results here on homeownership effects align with the fundamental ownership-schooling relationships identified by Green and White (1997), which is the seminal paper in this area of study.

Dwelling type does not appear to influence the school attendance decision for Indigenous youth. None of the dwelling type effects are significant at conventional levels.

Housing adequacy and affordability do not appear to influence school attendance for Indigenous youth. In contrast, these factors appear to be positively associated with school attendance for non-Indigenous youth. The adequate housing and affordable housing effects are never significant in the restricted sample but are in the larger sample except in the most complex specifications.

---

[11] Although adequate housing appears to increase the odds of school attendance for both Indigenous and Non-Indigenous youth, the positive effects in the Indigenous youth sample are never significant. Interpreting the influence of affordable housing is challenging as the effect sign flips and statistical significance drops with the addition of controls.

The influence of subsidized housing appears to differ between Indigenous and non-Indigenous youth. While the effect of residing in non-subsidized over subsidized dwellings is always positive but never significant for the restricted sample, the corresponding effect for the larger sample is always negative and sometimes significant.

The overall negative influence from residing in a multigenerational household appears to be shared between Indigenous and non-Indigenous groups, yet the effect is much more negative for Indigenous youth. The odds of attending school are between 27.2 and 31.1% lower for Indigenous youth residing in multigenerational households relative to non-multigenerational households. However, the comparable odds of school attendance are only 5.6 and 14.0% lower when averaged across both Indigenous and non-Indigenous youth.

Historical gaps in the levels of educational attainment between Indigenous and non-Indigenous peoples might provide an explanation for differences in the effects on school attendance from residing in multigenerational households. More specifically, Indigenous youth are more likely than non-Indigenous youth to have older relatives with lower levels of educational attainment, potentially leaving these youth with disadvantages in terms of family and social support.

The results for household composition support the findings for suitable housing, although with some subtleties. Among Indigenous youth, there appears to be no influence on school attendance from the presence of additional children (0 to 18 years) in the household. When averaged over both Indigenous and non-Indigenous youth, however, each additional child in the household leads to a decreased odds of school attendance of between 8.8 and 11.5%. At the same time, however, each additional youth (aged 15 to 18 years) in the household is associated with a 12.4 to 15.1% greater odds of school attendance for Indigenous youth and 17.4 to 19.7% greater odds of school attendance among youth in general. The additional child effect is never significant in the restricted sample, but it is always highly significant in the larger sample. The additional youth effect is always significant in both samples. Since youths are also children, having additional youth in the household has a net positive effect on school attendance in general.

The household composition effects are likely tied to issues of crowding, the inability to find space for studying, and peer effects. More specifically, more children in the home present a larger burden on parental resources and more distraction for older children. At the same time, other similar-aged youth in the home may act as role models with respect to school attendance.

Both Indigenous and non-Indigenous youth share in being positively influenced in school attendance by household income, although the effect is larger for Indigenous youth. The results from the restricted sample indicate that each doubling of total household after-tax income is associated with a 2.7 to 5.4% increase in the odds of school attendance, while the results from the larger sample indicate each doubling of income leads to a smaller 0.6 to 4.3% increase. In the restricted sample, the income effects are significant in two out of four model specifications that include income as a control. In the larger sample, these effects are significant in three specifications.

Unsurprisingly, school attendance for Indigenous youth is highly influenced by the primary household maintainer's education attainment. Each level of schooling completed by the primary household maintainer, with the exception of certificates below the undergraduate level, generates a significant and positive effect on school attendance. Nonetheless, these effects are smaller than those for non-Indigenous youth.

65

The results from Model 5 indicate that geographic characteristics are also important with respect to school attendance. Indigenous and non-Indigenous youth residing in larger centres (i.e., suburban and urban environments) are more likely to attend school relative to those in rural settings, although these effects are stronger for non-Indigenous youth.

Different forms of residential mobility are also relevant factors. Indigenous youth that have moved or remained resident within their communities over the previous year were more likely to attend school. These effects are stronger for non-Indigenous youth.

The addition of geographic factors to the model does appear to influence the magnitude of some core housing effects for Indigenous youth. The increased odds of school attendance associated with adequate housing grows, while the decreased odds of school attendance associated with affordable housing deepens. However, neither of these effects become significant.

In terms of comparative analysis, the results from the ordinary least squares (i.e., linear probability models) agree in sign with the results from the multivariate logistic regression models. In addition, nearly every significant effect in the multivariate logistic regression results is also significant in the ordinary least squares results.

The unadjusted R^2 in ordinary least squares is a measure of how well the independent variables collectively describe the dependent variable. The null model, which considers no variables at all, has an R^2 value of 0; a model that explains changes in perceived general health perfectly would have an R^2 value of 1. However, R^2 always increases as variables are added to a model specification. When we compare the value of R^2 between different model specifications, we can identify which groups of effects are explaining the most about the model.

It is worthwhile to note that the addition of geographic factors leads to a moderate increase in the goodness-of-fit (i.e., R2). This result suggests that geographic factors are responsible for some of the variation in school attendance.

In our models of Indigenous school attendance, the R^2 values for ordinary least squares Models 1 through 5 are 0.035, 0.044, 0.046, 0.050, and 0.055, respectively. The largest increase in R^2 is between the null model and Model 1, implying that the variables added to Model 1 (personal characteristics) are the most important effects among those considered in understanding differences in school attendance. This finding aligns with those found in the logistic regression analysis.

McFadden's pseudo-R^2 is a deviance-based measure designed to behave like the unadjusted R^2, but it applies to logistic regression models. The R^2 values for logistic Models 1 through 5 are 0.058, 0.069, 0.071, 0.076, and 0.082, respectively. Here we see the same increase at Model 1, and lack of increases elsewhere, further confirming that both sets of models behave similarly.

66

Table 4.2.1: School Attendance, Indigenous Youth, 2016 – Part I

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4	Model 5
	(Intercept)	9.739***	8.345***	8.259***	8.459***	7.935***
		(0.368)	(0.518)	(0.546)	(0.585)	(0.640)
Youth Socio-Demographic and Indigenous Characteristics	Age	-0.462***	-0.467***	-0.466***	-0.467***	-0.469***
		(0.021)	(0.022)	(0.022)	(0.022)	(0.022)
	Male	-0.085*	-0.088*	-0.087*	-0.084*	-0.091*
		(0.038)	(0.038)	(0.038)	(0.038)	(0.038)
	Inuk (Inuit)	-0.853***	-0.541***	-0.151	-0.198	-0.207
		(0.109)	(0.111)	(0.156)	(0.157)	(0.161)
	Métis or Other Indigenous	-0.103	-0.160**	-0.163*	-0.162*	-0.096
		(0.062)	(0.060)	(0.070)	(0.070)	(0.071)
	Indigenous Citizenship	-0.155	-0.104	-0.093	-0.097	-0.073
		(0.082)	(0.088)	(0.099)	(0.098)	(0.101)
	Registration Status	-0.110	-0.080	-0.037	-0.033	-0.014
		(0.082)	(0.085)	(0.093)	(0.093)	(0.095)
Dwelling and Household Characteristics	Rented (Non-Subsidized)		0.112	0.101	0.044	0.068
			(0.064)	(0.066)	(0.067)	(0.067)
	Owned		0.381***	0.370***	0.249**	0.228**
			(0.074)	(0.079)	(0.079)	(0.078)
	Apartment		0.227	0.219	0.147	-0.069
			(0.145)	(0.144)	(0.143)	(0.143)
	Semi-Detached		0.279	0.264	0.200	-0.017
			(0.143)	(0.142)	(0.141)	(0.141)
	Single-Detached		0.125	0.125	0.061	-0.097
			(0.136)	(0.135)	(0.134)	(0.131)
	Adequate Housing		0.083	0.084	0.067	0.083
			(0.065)	(0.066)	(0.065)	(0.066)
	Suitable Housing		0.276***	0.289***	0.270***	0.257***
			(0.061)	(0.064)	(0.065)	(0.064)
	Affordable Housing		-0.015	0.002	-0.023	-0.056
			(0.049)	(0.049)	(0.050)	(0.051)
	Total After-Tax Income		0.072**	0.076**	0.038	0.043
			(0.024)	(0.024)	(0.027)	(0.027)
	Household Size		-0.075**	-0.055	-0.047	-0.048
			(0.026)	(0.030)	(0.029)	(0.029)
	Number of Children		0.046	0.036	0.038	0.053
			(0.033)	(0.036)	(0.037)	(0.036)
	Number of Youths		0.141**	0.131**	0.125*	0.117*
			(0.048)	(0.049)	(0.049)	(0.049)
	Household Maintainers		0.023	0.034	0.044	0.045
			(0.040)	(0.040)	(0.041)	(0.039)
	Multigenerational Household		-0.333***	-0.372***	-0.332***	-0.317***
			(0.068)	(0.071)	(0.071)	(0.071)

Table 4.2.1: School Attendance, Indigenous Youth, 2016 – Part II

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4	Model 5
Primary Household Maintainer Socio-Demographic and Indigenous Characteristics	Age			0.002	0.003	0.002
				(0.003)	(0.003)	(0.003)
	Male			-0.138**	-0.073	-0.072
				(0.048)	(0.049)	(0.049)
	(Legally) Married			-0.038	-0.081	-0.096
				(0.075)	(0.076)	(0.077)
	Common-Law			-0.043	-0.046	-0.066
				(0.079)	(0.080)	(0.081)
	Separated			-0.031	-0.077	-0.090
				(0.089)	(0.089)	(0.088)
	Divorced or Widowed			0.018	-0.011	-0.009
				(0.079)	(0.078)	(0.078)
	Inuk (Inuit)			-0.491*	-0.417*	-0.453*
				(0.202)	(0.201)	(0.215)
	Métis and Other Indigenous			0.005	0.010	0.015
				(0.106)	(0.106)	(0.107)
	Non-Indigenous			-0.005	-0.020	-0.015
				(0.100)	(0.100)	(0.104)
	Indigenous Citizenship			0.010	0.012	0.037
				(0.158)	(0.158)	(0.164)
	Registration Status			-0.132	-0.134	-0.132
				(0.150)	(0.149)	(0.154)
	Deviance	70,470.41	69,639.02	69,546.66	69,152.48	68,654.23
	McFadden (Pseudo) R^2	0.058	0.069	0.071	0.076	0.082
	N	89.520	89.520	89.520	89.520	89.520

Note: The sample is restricted to Canadian-born, Indigenous youth aged 15 to 18 years that resided outside of a reserve with a primary household maintainer aged 19 years or older. Model 1 includes controls for the youth's socio-demographic and Indigenous characteristics. Model 2 adds controls for dwelling and household characteristics. Model 3 adds controls for the primary household maintainer's socio-demographic and Indigenous characteristics. Model 4 adds controls for the primary household maintainer's human capital and labour market characteristics. Model 5 adds controls for geographic characteristics. Survey weights are used for the analysis. Cluster robust standard errors at the census subdivision level are in parentheses.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

Source: *2016 Census of Population* (Statistics Canada 2017b)

Table 4.2.2: School Attendance, Indigenous and Non-Indigenous Youth, 2016 – Part I

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4	Model 5
	(Intercept)	7.940***	6.807***	6.437***	6.867***	6.391***
		(0.280)	(0.276)	(0.271)	(0.272)	(0.281)
Youth Socio-Demographic and Indigenous Characteristics	Age	-0.352***	-0.374***	-0.377***	-0.372***	-0.373***
		(0.017)	(0.017)	(0.017)	(0.018)	(0.018)
	Male	-0.187***	-0.191***	-0.192***	-0.192***	-0.197***
		(0.014)	(0.014)	(0.014)	(0.014)	(0.014)
	Inuk (Inuit)	-0.841***	-0.595***	-0.314*	-0.374*	-0.452**
		(0.107)	(0.109)	(0.144)	(0.147)	(0.153)
	Métis or Other Indigenous	-0.104	-0.167**	-0.170*	-0.164*	-0.133
		(0.061)	(0.062)	(0.069)	(0.070)	(0.069)
	Non-Indigenous	0.293***	0.160**	0.116	0.071	-0.079
		(0.062)	(0.059)	(0.063)	(0.064)	(0.066)
	Indigenous Citizenship	-0.149	-0.062	-0.103	-0.110	-0.080
		(0.082)	(0.088)	(0.099)	(0.098)	(0.099)
	Registration Status	-0.113	-0.089	-0.028	-0.020	0.001
		(0.081)	(0.085)	(0.092)	(0.091)	(0.094)
Dwelling and Household Characteristics	Rented (Non-Subsidized)		-0.061	-0.048	-0.133**	-0.116**
			(0.048)	(0.047)	(0.044)	(0.041)
	Owned		0.299***	0.295***	0.125*	0.080
			(0.055)	(0.056)	(0.048)	(0.042)
	Apartment		0.631***	0.622***	0.496***	0.072
			(0.083)	(0.081)	(0.080)	(0.064)
	Semi-Detached		0.574***	0.564***	0.436***	0.110
			(0.066)	(0.066)	(0.066)	(0.063)
	Single-Detached		0.397***	0.394***	0.277***	0.083
			(0.059)	(0.059)	(0.059)	(0.058)
	Adequate Housing		0.071**	0.081**	0.059*	0.042
			(0.026)	(0.026)	(0.026)	(0.026)
	Suitable Housing		0.189***	0.185***	0.141***	0.145***
			(0.036)	(0.037)	(0.036)	(0.031)
	Affordable Housing		0.117***	0.113***	0.050	-0.008
			(0.028)	(0.028)	(0.025)	(0.023)
	Total After-Tax Income		0.061***	0.061***	0.010	0.025**
			(0.008)	(0.009)	(0.010)	(0.010)
	Household Size		-0.022	-0.031*	-0.014	-0.027*
			(0.014)	(0.013)	(0.012)	(0.012)
	Number of Children		-0.122***	-0.097***	-0.105***	-0.092***
			(0.013)	(0.013)	(0.013)	(0.012)
	Number of Youths		0.180***	0.168***	0.160***	0.162***
			(0.017)	(0.017)	(0.017)	(0.018)
	Household Maintainers		0.031	0.026	0.037*	0.035*
			(0.016)	(0.018)	(0.017)	(0.016)
	Multigenerational Household		-0.121**	-0.151***	-0.076	-0.058
			(0.044)	(0.045)	(0.043)	(0.043)

Table 4.2.2: School Attendance, Indigenous and Non-Indigenous Youth, 2016 – Part II

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4	Model 5
Primary Household Maintainer Socio-Demographic and Indigenous Characteristics	Age			0.009***	0.008***	0.005***
				(0.001)	(0.001)	(0.001)
	Male			-0.163***	-0.075***	-0.062***
				(0.018)	(0.018)	(0.018)
	(Legally) Married			0.064	0.002	0.126***
				(0.042)	(0.041)	(0.034)
	Common-Law			0.155***	0.148***	0.110**
				(0.038)	(0.037)	(0.037)
	Separated			-0.005	-0.046	0.093**
				(0.036)	(0.037)	(0.034)
	Divorced or Widowed			-0.036	-0.057	0.044
				(0.032)	(0.033)	(0.031)
	Inuk (Inuit)			-0.324	-0.260	-0.352
				(0.170)	(0.173)	(0.185)
	Métis and Other Indigenous			0.034	0.045	0.075
				(0.083)	(0.083)	(0.084)
	Non-Indigenous			0.085	0.067	0.045
				(0.079)	(0.079)	(0.080)
	Indigenous Citizenship			0.169	0.154	0.185
				(0.141)	(0.138)	(0.144)
	Registration Status			-0.190	-0.184	-0.168
				(0.123)	(0.121)	(0.126)
	Deviance	810,638.29	802,953.01	801,952.20	793,214.21	782,620.20
	McFadden (Pseudo) R^2	0.014	0.023	0.024	0.035	0.048
	N	1,300,195	1,300,195	1,300,195	1,300,195	1,300,195

Note: The sample is restricted to Canadian-born, Indigenous and non-Indigenous youth aged 15 to 18 years that resided outside of a reserve with a primary household maintainer aged 19 years or older. Model 1 includes controls for the youth's socio-demographic and Indigenous characteristics. Model 2 adds controls for dwelling and household characteristics. Model 3 adds controls for the primary household maintainer's socio-demographic and Indigenous characteristics. Model 4 adds controls for the primary household maintainer's human capital and labour market characteristics. Model 5 adds controls for geographic characteristics. Survey weights are used for the analysis. Cluster robust standard errors at the census subdivision level are in parentheses.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

Source: *2016 Census of Population* (Statistics Canada 2017b)

4.3 School Completion

Table 4.3.1 presents the results of the multivariate logistic regression analysis for the sample restricted to Indigenous youth alone. Table 4.3.2 presents the corresponding results for the larger sample that includes both Indigenous and non-Indigenous youth. The results are discussed in terms of odds ratios.

The results suggest that school completion systematically differs both as a whole and in terms of dwelling and household factors between Indigenous and non-Indigenous youth. These findings, along with their policy implications, are highlighted further through a comparison of the results from the two samples.

While age is a positive influence that is shared between Indigenous and non-Indigenous youth, the same is not true for being male. Each additional year of age is associated with an increased odds of completing school of about 466.8% for Indigenous youth and about 478.4% for the larger sample that includes both Indigenous and non-Indigenous youth.[12] However, being male is associated with a decreased odds of about 28.5% for Indigenous youth but a decreased odds of only 22.4% in the larger sample.

For Indigenous youth, there appears to be no effect of the age of their primary household maintainer or of having a male primary household maintainer, but this is not the case for non-Indigenous youth. The odds of completing school for Indigenous youth do not statistically differ with the age or sex of their primary maintainer. However, when averaged across Indigenous and non-Indigenous youth, the odds of completing school rise by a statistically significant 0.8 to 1.0% for each year of age of the primary household maintainer and are a statistically significant 6.0 to 9.1% greater with male primary household maintainers.

Looking at the effects for Indigenous identity groups indicates that Inuit youth are substantially less likely to complete school relative to their First Nations peers. The results also suggest that Métis and other Indigenous youth are slightly more likely to complete school than First Nations youth. Non-Indigenous youth, on the other hand, have a much greater likelihood of completing school relative to Indigenous youth. The odds of an Inuit youth completing school are between 39.1 and 67.3% lower in the restricted sample and between 44.1 and 67.4% lower in the larger sample. Having an Inuit primary household maintainer does not appear to have any statistically-significant effect on completing school.

The odds of completing school for Métis or other Indigenous youth are between 4.7 and 24.1% greater in the restricted sample and between 9.6 and 24.0% greater in the larger sample. Still, the Métis or Other Indigenous effects are only significant in the sparsest models.

The odds of completing school for non-Indigenous youth are between 29.6 and 95.4% greater than First Nations youth. These odds are always significant at the 0.001 level.

Indigenous citizenship appears to be negatively associated with school completion but registration status does not. Relative to non-Indigenous citizens, the odds of completing school for Indigenous citizens are between 12.1 and 20.7% lower in the restricted sample and between 13.6 and 18.5% lower in the larger sample. The citizenship effects are significant in two out of five model specifications in the restricted sample, but only significant in the sparsest model specification in the most complex model specification.

---

[12] The point estimate of 1.767 is transformed into an odds ratio (i.e., $\exp(1.767) - 1 = 4.853$).

Registration effects, although always positive in all model specifications and in both samples, are never significant at conventional levels.

The likelihood of completing school rises as Indigenous youth move into more secure forms of housing tenure. Relative to subsidized rentals, the odds of completing school for Indigenous youth are 23.0 to 31.9% greater for those residing in non-subsidized rentals and 36.1 to 73.0% greater for those residing in owned dwellings. These effects are always significant. Moreover, these odds are very similar to those found when averaging over both Indigenous and non-Indigenous youth (i.e., 7.0 to 23.5% and 33.1 to 71.8%, respectively).

Residing in single-detached dwellings is not as positively influential on school completion for Indigenous youth as is the case for non-Indigenous youth. For both Indigenous and non-Indigenous youth, the odds of completing school are between 22.1 and 90.0% greater for those residing in apartments, 19.7 to 50.5% greater for those residing in semi-detached dwellings, and 18.2 to 37.2% greater for those in single-detached dwellings as compared to those residing in other dwelling types. In the restricted sample, only the apartment and semi-detached dwelling effects are significant in three of the four model specifications that include dwelling types as controls. In the larger sample, all dwelling types are significant in all model specifications.

Housing adequacy, suitability, and affordability are not significant determining factors in terms of school completion for Indigenous youth. Suitability is the only effect that is significant, but this is only in the sparsest model specification.

In contrast, for non-Indigenous youth, housing adequacy is positively associated with school completion, while housing suitability and affordability are negatively associated with school completion. When averaged over Indigenous and non-Indigenous youth, the odds of completing school are between 8.1 to 12.3% greater for those with adequate housing. However, for those in suitable and affordable housing, the odds of completing school are a respective 1.2 to 8.2% and 0.2 to 12.6% lower, respectively. The adequacy effects are always significant, while the suitability and affordability effects are only significant for the most complex model specification.

It is important to note here that cross-sectional analysis, such as this, may only be able to capture short run effects of dwelling characteristics. Longitudinal studies are better served at drawing out long run influences of these factors on school completion.

Indigenous youth do not appear to be influenced towards or against completing school by residing in multigenerational households, although this factor could be a positive influence for non-Indigenous youth. The effect of multigenerational household status is never significant in the restricted sample. In the larger sample, however, this effect is positive for three out of four model specifications and significant for the most complex model.

Similar to multigenerational household status, household composition factors are not associated with school completion for Indigenous youth. The effects of increases in the number of household members, children, and similar-aged youth are all negative but never significant. In contrast, the results from the larger sample indicate that larger households raise the odds of non-Indigenous youth completing school, while more children and similar-aged youth in the household lower the odds of completing school, with each of these effects being significant.

73

As was the case of school attendance, the positive influence of household income on school completion is shared between both Indigenous and non-Indigenous youth, with the effect, again, being larger for Indigenous youth. The results from the restricted sample indicate that each doubling of total household after-tax income is associated with a 13.1 to 16.7% increase in the odds of school completion, while the results from the larger sample indicate each doubling of income leads to a smaller 3.1 to 5.3% increase. In both samples, the income effects are significant in all model specifications that include income as a control.

School completion for Indigenous youth is strongly and positively influenced by their primary household maintainer's education attainment. Each level of schooling completed by the primary household maintainer generates a significant and positive effect on school attendance. Contrary to the case of school attendance, these effects are all larger for Indigenous youth than for non-Indigenous youth, with the exception of certificates below undergraduate.

The results from Model 5 indicate that geographic setting is not an important factor for school completion for Indigenous youth but residential stability is. None of the geographic setting effects are significant, and the addition of geographic factors to the model does not change the significance of adequate, affordable, and suitable housing. Residing in the same residence (in the same community) for five year offers a 38.3% greater odds of completing school. In the larger sample, most of the geographic setting and residential mobility effects are significant. These results appear to confirm the findings of Green and White (1997), who determined that renting in one place for a long time mitigates the negative effects of rental housing on education. These results also appear to confirm the findings of Turner and Thompson (2015), who identified a negative correlation between residential mobility and school performance for the off-reserve First Nations population.

The addition of geographic factors to the model does appear to influence the magnitude of some core housing effects for Indigenous youth. The increased odds of school completion associated with adequate housing grows, the increased odds of school completion associated with suitable housing declines, and the decreased odds of school completion associated with affordable housing deepens. However, none become significant.

In terms of comparative analysis, the results from the ordinary least squares (i.e., linear probability models) agree in sign with the results from the multivariate logistic regression models. In addition, nearly every significant effect in the multivariate logistic regression results is also significant in the ordinary least squares results.

The unadjusted R^2 in ordinary least squares is a measure of how well the independent variables collectively describe the dependent variable. The null model, which considers no variables at all, has an R^2 value of 0; a model that explains changes in perceived general health perfectly would have an R^2 value of 1. However, R^2 always increases as variables are added to a model specification. When we compare the value of R^2 between different model specifications, we can identify which groups of effects are explaining the most about the model.

In our models of Indigenous school completion, the R^2 values for ordinary least squares Models 1 through 5 are 0.235, 0.243, 0.244, 0.247, and 0.256, respectively. By far, the largest increase in R^2 is between the null model and Model 1, implying that the variables added to Model 1 (personal characteristics) are the

74

most important effects among those considered in understanding differences in school completion. This finding aligns with those found in the logistic regression analysis.

It is worthwhile to note that the addition of geographic factors does not lead to a large increase in the goodness-of-fit (i.e., R2). This result suggests that geographic factors are not responsible for a substantial share of the variation in school completion.

McFadden's pseudo-R^2 is a deviance-based measure designed to behave like the unadjusted R^2, but it applies to logistic regression models. The R^2 values for logistic Models 1 through 5 are 0.318, 0.330, 0.331, 0.335, and 0.349, respectively. Here we see the same dominant increase at Model 1, and small increases elsewhere, further confirming that both sets of models behave similarly.

Table 4.3.1: School Completion, Indigenous Youth, 2016 – Part I

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4	Model 5
	(Intercept)	-30.702***	-33.954***	-34.084***	-34.357***	-35.188***
		(0.590)	(0.942)	(0.960)	(0.962)	(1.014)
Youth Socio-Demographic and Indigenous Characteristics	Age	1.717***	1.726***	1.727***	1.736***	1.767***
		(0.034)	(0.035)	(0.035)	(0.035)	(0.035)
	Male	-0.334***	-0.333***	-0.336***	-0.336***	-0.343***
		(0.049)	(0.050)	(0.049)	(0.051)	(0.051)
	Inuk (Inuit)	-1.117***	-0.803***	-0.496*	-0.502*	-0.541*
		(0.132)	(0.129)	(0.234)	(0.233)	(0.240)
	Métis or Other Indigenous	0.216***	0.142*	0.051	0.046	0.065
		(0.064)	(0.068)	(0.081)	(0.081)	(0.079)
	Indigenous Citizenship	-0.206*	-0.129	-0.210	-0.232*	-0.185
		(0.096)	(0.093)	(0.110)	(0.112)	(0.112)
	Registration Status	0.121	0.157	0.166	0.181	0.189
		(0.086)	(0.085)	(0.100)	(0.101)	(0.099)
Dwelling and Household Characteristics	Rented (Non-Subsidized)		0.277***	0.264**	0.207*	0.215*
			(0.084)	(0.086)	(0.087)	(0.096)
	Owned		0.548***	0.491***	0.407***	0.308**
			(0.097)	(0.097)	(0.096)	(0.104)
	Apartment		0.479**	0.461**	0.428**	0.245
			(0.160)	(0.159)	(0.161)	(0.156)
	Semi-Detached		0.399**	0.381*	0.347*	0.270
			(0.154)	(0.153)	(0.154)	(0.153)
	Single-Detached		0.242	0.218	0.183	0.200
			(0.148)	(0.147)	(0.148)	(0.148)
	Adequate Housing		0.044	0.032	0.037	0.051
			(0.076)	(0.078)	(0.077)	(0.078)
	Suitable Housing		0.162*	0.153	0.138	0.064
			0.076)	(0.085)	(0.085)	(0.086)
	Affordable Housing		-0.041	-0.039	-0.017	-0.056
			(0.077)	(0.077)	(0.076)	(0.079)
	Total After-Tax Income		0.223**	0.217**	0.177*	0.197*
			(0.081)	(0.081)	(0.081)	(0.088)
	Household Size		-0.035	-0.043	-0.036	-0.042
			(0.038)	(0.041)	(0.041)	(0.041)
	Children		-0.077	-0.060	-0.055	-0.043
			(0.041)	(0.041)	(0.041)	(0.041)
	Youths		-0.017	-0.024	-0.033	-0.047
			(0.056)	(0.055)	(0.056)	(0.053)
	Household Maintainers		0.050	0.052	0.061	0.064
			(0.039)	(0.039)	(0.039)	(0.040)
	Multigenerational Household		-0.152	-0.174	-0.125	-0.120
			(0.086)	(0.097)	(0.100)	(0.100)

Table 4.3.1: School Completion, Indigenous Youth, 2016 – Part II

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4	Model 5
Primary Household Maintainer Socio-Demographic and Indigenous Characteristics	Age			0.002	0.006	0.002
				(0.098)	(0.100)	(0.099)
	Male			0.052	0.045	0.040
				(0.055)	(0.061)	(0.061)
	(Legally) Married			0.086	0.056	0.123
				(0.105)	(0.102)	(0.101)
	Common-Law			-0.067	-0.070	-0.109
				(0.109)	(0.105)	(0.104)
	Separated			-0.057	-0.098	-0.018
				(0.101)	(0.100)	(0.101)
	Divorced or Widowed			0.164	0.139	0.216*
				(0.098)	(0.100)	(0.099)
	Inuk (Inuit)			-0.341	-0.302	-0.431
				(0.272)	(0.272)	(0.283)
	Métis and Other Indigenous			0.230	0.230	0.251*
				(0.124)	(0.125)	(0.124)
	Non-Indigenous			0.165	0.155	0.185
				(0.102)	(0.101)	(0.101)
	Indigenous Citizenship			0.226	0.257	0.339
				(0.179)	(0.183)	(0.181)
	Registration Status			-0.028	-0.044	-0.044
				(0.155)	(0.158)	(0.155)
	Deviance	57,473.51	56,495.16	56,389.82	56,026.98	54,888.50
	McFadden (Pseudo) R^2	0.318	0.330	0.331	0.335	0.349
	N	89,520	89,520	89,520	89,520	89,520

Note: The sample is restricted to Canadian-born, Indigenous youth aged 15 to 18 years that resided outside of a reserve with a primary household maintainer aged 19 years or older. Model 1 includes controls for the youth's socio-demographic and Indigenous characteristics. Model 2 adds controls for dwelling and household characteristics. Model 3 adds controls for the primary household maintainer's socio-demographic and Indigenous characteristics. Model 4 adds controls for the primary household maintainer's human capital and labour market characteristics. Model 5 adds controls for geographic characteristics. Survey weights are used for the analysis. Cluster robust standard errors at the census subdivision level are in parentheses.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

Source: *2016 Census of Population* (Statistics Canada 2017b)

Table 4.3.2: School Completion, Indigenous and Non-Indigenous Youth, 2016 – Part I

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4	Model 5
	(Intercept)	-31.153***	-32.736***	-33.248***	-33.399***	-34.079***
		(0.411)	(0.422)	(0.451)	(0.453)	(0.445)
Youth Socio-Demographic and Indigenous Characteristics	Age	1.740***	1.741***	1.740***	1.749***	1.804***
		(0.023)	(0.022)	(0.022)	(0.021)	(0.020)
	Male	-0.248***	-0.249***	-0.251***	-0.252***	-0.265***
		(0.014)	(0.014)	(0.014)	(0.014)	(0.015)
	Inuk (Inuit)	-1.122***	-0.926***	-0.582**	-0.600**	-0.694**
		(0.133)	(0.128)	(0.223)	(0.223)	(0.245)
	Métis or Other Indigenous	0.215***	0.169*	0.117	0.111	0.092
		(0.064)	(0.066)	(0.075)	(0.076)	(0.074)
	Non-Indigenous	0.670***	0.543***	0.466***	0.445***	0.259***
		(0.061)	(0.060)	(0.065)	(0.064)	(0.062)
	Indigenous Citizenship	-0.205*	-0.146	-0.164	-0.180	-0.151
		(0.096)	(0.094)	(0.102)	(0.103)	(0.104)
	Registration Status	0.121	0.138	0.119	0.129	0.143
		(0.087)	(0.086)	(0.095)	(0.096)	(0.097)
Dwelling and Household Characteristics	Rented (Non-Subsidized)		0.211***	0.207***	0.140***	0.068
			(0.045)	(0.047)	(0.043)	(0.049)
	Owned		0.541***	0.530***	0.423***	0.286***
			(0.059)	(0.057)	(0.049)	(0.050)
	Apartment		0.642***	0.630***	0.578***	0.200***
			(0.125)	(0.121)	(0.114)	(0.061)
	Semi-Detached		0.409***	0.406***	0.351***	0.180**
			(0.066)	(0.064)	(0.061)	(0.056)
	Single-Detached		0.316***	0.315***	0.265***	0.167**
			(0.055)	(0.056)	(0.057)	(0.054)
	Adequate Housing		0.110***	0.116***	0.107***	0.078**
			(0.026)	(0.027)	(0.027)	(0.026)
	Suitable Housing		-0.020	-0.012	-0.034	-0.086***
			(0.024)	(0.026)	(0.026)	(0.024)
	Affordable Housing		-0.002	-0.015	-0.031	-0.135***
			(0.025)	(0.024)	(0.022)	(0.018)
	Total After-Tax Income		0.070***	0.076***	0.044***	0.074***
			(0.013)	(0.013)	(0.011)	(0.012)
	Size		0.087***	0.090***	0.098***	0.089***
			(0.012)	(0.011)	(0.010)	(0.012)
	Children		-0.158***	-0.140***	-0.138***	-0.139***
			(0.010)	(0.013)	(0.013)	(0.011)
	Youths		-0.060***	-0.068***	-0.076***	-0.078***
			(0.016)	(0.017)	(0.017)	(0.016)
	Household Maintainers		-0.017	-0.004	0.005	0.003
			(0.010)	(0.013)	(0.013)	(0.012)
	Multigenerational Household		0.025	-0.019	0.029	0.088**
			(0.035)	(0.039)	(0.035)	(0.028)

Table 4.3.2: School Completion, Indigenous and Non-Indigenous Youth, 2016 – Part II

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4	Model 5
Primary Household Maintainer Socio-Demographic	Age			0.008***	0.010***	0.008***
				(0.002)	(0.002)	(0.001)
	Male			0.058***	0.083***	0.087***
				(0.015)	(0.016)	(0.016)
	(Legally) Married			-0.195***	-0.226***	0.035
				(0.048)	(0.048)	(0.038)
	Common-Law			0.015	0.007	-0.078*
				(0.035)	(0.036)	(0.033)
	Separated			-0.203***	-0.231***	0.071
				(0.039)	(0.040)	(0.041)
	Divorced or Widowed			-0.064	-0.077*	0.115***
				(0.034)	(0.034)	(0.028)
	Inuk (Inuit)			-0.399	-0.355	-0.499
				(0.252)	(0.250)	(0.276)
	Métis and Other Indigenous			0.164	0.174	0.191
				(0.096)	(0.097)	(0.099)
	Non-Indigenous			0.197*	0.187*	0.156
				0.081)	(0.082)	(0.084)
	Indigenous Citizenship			0.081	0.095	0.131
				(0.150)	(0.151)	(0.154)
	Registration Status			0.036	0.036	0.046
				(0.130)	(0.132)	(0.134)
	Deviance	962,391.90	954,342.67	952940.34	949,593.96	921,351.26
	McFadden (Pseudo) R^2	0.334	0.340	0.341	0.343	0.362
	N	1,300,195	1,300,195	1,300,195	1,300,195	1,300,195

Note: The sample is restricted to Indigenous youth that are Canadian-born, aged 15 to 18 years, with a primary household maintainer aged 19 years or older, and residing outside of a reserve. Model 1 includes controls for the youth's socio-demographic and Indigenous characteristics. Model 2 adds controls for dwelling and household characteristics. Model 3 adds controls for the primary household maintainer's socio-demographic and Indigenous characteristics. Model 4 adds controls for the primary household maintainer's human capital and labour market characteristics. Model 5 adds controls for geographic characteristics. Survey weights are used for the analysis. Cluster robust standard errors at the census subdivision level are in parentheses.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

Source: *2016 Census of Population* (Statistics Canada 2017b)

5.0 Labour

Key Findings

- Labour Force Participation:
  - Labour force participation systematically differs both as a whole and in terms of dwelling and household factors between Indigenous and non-Indigenous people.
  - The likelihood of participating in the labour force rises as Indigenous people shift into more secure forms of housing tenure (i.e., homeownership).
  - Dwelling type does not appear to influence the labour force participation decision for Indigenous people.
  - Adequate and suitable housing are not positively or negatively associated with labour force participation for Indigenous people.
  - Residing in a multigenerational home does not appear to affect the labour force participation for Indigenous people.
  - Household size and structure are very influential on Indigenous labour force participation, yet the strength of these influences do not appear to be much different from the non-Indigenous experience.
  - Labour force participation declines as the number of household members and numbers of youths in the home rise.
  - Labour force participation grows as the number of children in the home and the number of household maintainers rise.

- Full-Time Work Status:
  - The likelihood of full-time work systematically differs both as a whole and in terms of dwelling and household factors between Indigenous and non-Indigenous workers.
  - The likelihood of having full-time work rises as Indigenous workers shift into more secure forms of housing tenure (i.e., homeownership).
  - Dwelling type does not appear to influence the likelihood of working full time for Indigenous workers, which is different from the case for non-Indigenous people.
  - Adequate and affordable housing are positively associated with full-time work status for Indigenous workers, while suitable housing has a negative association.
  - Residing in a multigenerational home increases the odds of full-time work for Indigenous workers.
  - Household size and the number of youths in the home decrease the likelihood of working full time for Indigenous workers.
  - The number of children and the number of household maintainers in the home both positively influence full-time work status for Indigenous workers.

- Job Satisfaction:
  - Housing tenure appears to have no influence over job satisfaction for Indigenous workers.
  - Dwelling type does not appear to influence the likelihood of job satisfaction for Indigenous workers.
  - Indigenous workers with adequate housing are substantially more likely to be satisfied with their jobs.

- ○ Suitable and affordable housing do not influence job satisfaction for Indigenous workers.
- ○ The likelihood of job satisfaction for Indigenous workers rises with household size, but it is lower for those in multigenerational households.

The following list presents the background characteristics as indicated by the literature review that explain labour market outcomes: (i.e., labour force participation, full-time work status, and job satisfaction) for individuals aged 15 years or more. These characteristics are broken down by category.

Individual Socio-Demographic and Indigenous Characteristics:
- Sex
- Age
- Marital status
- Indigenous identity group
- Indigenous citizenship
- Registration status

Dwelling and Household Characteristics:
- Housing tenure
- Dwelling type
- Adequacy
- Suitability
- Affordability
- Household income
- Household size
- Number of children in the household aged 0 to 18 years
- Number of youths in the household aged 15 to 18 years
- Number of household maintainers
- Multigenerational household status

Individual Human Capital and Labour Market Characteristics:
- Highest level of schooling
- Full-time work status
- Industry of employment

Geographic:
- Province / territory
- Geographic setting
- 1-year mobility status
- 5-year mobility status

5.1 Labour Market Data Sources and Analysis

We use several samples based on the Census for the analysis of three labour market outcomes *Labour Force Participation*, *Full-Time Work Status*, and *Job Satisfaction*. The first sample is restricted to Canadian-born, Indigenous people aged 15 years or older that resided outside of a reserve. The second sample, which is larger than the first, uses the same conditions but also includes non-Indigenous people. These samples are used for the analysis of labour force participation. The third and fourth samples are similar to the first, with the exception of being restricted to workers. These samples are used for the analysis of full-time work status. Comparing the results of the analysis between the two samples in each set allows us to identify

systematic differences between Indigenous and non-Indigenous people in terms of the influence of multiple factors on labour force participation and full-time work status.

A fifth sample based on the APS is also used for the analysis of job satisfaction. This sample is restricted to Canadian-born, Indigenous workers aged 15 years or older that resided outside of a reserve. Here, we focus only on understanding job satisfaction for Indigenous people. The Census does not include a variable for job satisfaction. Without a larger sample that includes both Indigenous and non-Indigenous workers, we are unable to make comparisons between results that include or exclude non-Indigenous workers.

We use four model specifications to analyze the simultaneous influence of multiple factors on labour force participation. Model 1 examines the influence of the individual's socio-demographic and Indigenous characteristics. This model controls for *Age*, *Sex*, *Marital Status*, *Indigenous Identity Group*, *Indigenous Citizenship*, and *Registration Status*.

Model 2 builds on the first model by also examining the influence of dwelling and household characteristics. Dwelling characteristics include *Tenure*, *Dwelling Type*, *Adequate Housing*, *Affordable Housing*, and *Suitable Housing*. Household characteristics include *Household Total After-Tax Income*, *Household Size*, *Number of Children*, *Number of Youths*, Number of Household Maintainers, and *Multigenerational Household Status*.

Note, however, the *Number of Children (in Household)* and the *Number of Youths (in Household)* could not be included as household characteristics in the analysis because the APS does not collect data on individuals aged younger than 15 years and does not collect data on non-Indigenous household members. Estimates for these variables without this data would lead to undercounting.

Model 3 adds the individual's human capital characteristics to Model 2. In this case, we variously include controls for *Highest Level of Schooling*, *Full-Time Work Status*, and *Industry of Employment*. *Full-Time Work Status* and *Industry of Employment* are not used for the analysis of *Labour Force Participation* as an outcome. Only *Highest Level of Schooling* and *Industry of Employment* are used for the analysis of *Full-Time Work Status* as an outcome. All three controls are used for the analysis of *Job Satisfaction* as an outcome.

Lastly, Model 4 adds geographic characteristics to Model 3. These characteristics include *Region*, *Geographic Setting*, *1-Year Mobility Status*, and *5-Year Mobility Status*.

With the exception of Indigenous Identity Group, the controls are defined the same for each sample. There is no option of non-Indigenous identity for the sample with Indigenous people alone.

The primary estimation method used is weighted multivariate logistic regression, with the weights based on survey weights provided by Statistics Canada in the microdata. Multivariate logistic regression is an extension of multivariate least squares regression developed for binary responses. For comparative analysis, the models were also estimated using ordinary least squares (i.e., as linear probability models), although these results are not shown here.

In all of the model specifications, we use robust standard errors clustered on the census subdivision. This approach is taken, in part, to account for the variation in the local labour market that is due to unobserved community-level characteristics, such as industry structure and local labour market conditions.

5.2 Labour Force Participation

Table 5.2.1 presents the results of the multivariate logistic regression analysis for the sample restricted to Indigenous individuals alone. Table 5.2.2 presents the corresponding results for the larger sample that includes both Indigenous and non-Indigenous individuals. The results are discussed in terms of odds ratios.

The results suggest that labour force participation systematically differs both as a whole and in terms of dwelling and household factors between Indigenous and non-Indigenous people. These findings, along with their policy implications, are highlighted by a comparison of the results from the two samples.

Older Indigenous people are less likely to participate in the labour force. For each additional year of age the odds of an Indigenous person being in the labour force falls by a significant 4.0%.[13] The rate of attrition for Indigenous individuals is lower than for non-Indigenous people (i.e., a significant 6.7%). A greater reliance by Indigenous people on employment as a source of income may explain this attrition rate differential.

Both Indigenous and non-Indigenous males share a similar greater likelihood of participating in the labour force relative to females. Indigenous males have a greater odds of labour force participation of between 31.9 and 48.6%. When averaged over Indigenous and non-Indigenous people, these greater odds fall between 43.5 and 54.7%. These effects are always significant regardless of the sample.

Indigenous identity group effects provide additional evidence of the systematic differences in labour force participation both amongst Indigenous people and between Indigenous and non-Indigenous people. In the sample restricted to Indigenous people, the results indicate that the Inuit have between a 17.3% lower odds to a 71.1% greater odds of labour force participation relative to First Nations people. In the larger sample, the corresponding odds fall between -24.6 and 89.8%. The lower odds for the Inuit are only found in the sparsest model specification.

People of Métis or other Indigenous identity, on the other hand, experience a greater odds of participating in the labour force of between 3.8 to 16.9% in the restricted sample and between 11.0 and 26.1% in the larger sample. Non-Indigenous people have a similar corresponding odds of labour force participation of between 12.5 and 44.9%. The Indigenous identity group effects are always significant in the larger sample.

Indigenous citizenship and registration status are negatively associated with labour force participation. Indigenous citizens have a lower odds of participating in the labour force of between 3.1 to 11.2% in the restricted sample and between 5.4 and 13.8% in the larger sample. These effects are significant in the sparsest and most complex model specifications in the restricted sample and always significant in the larger sample.

---

[13] The point estimate of –0.043 is transformed into an odds ratio (i.e., $\exp(-0.043) - 1 = -0.042$).

84

Those with registration status face a lower odds of labour force participation of between 5.0 and 11.1% when considering only Indigenous people and falling between 4.7 and 11.3% when considering both Indigenous and non-Indigenous people. The registration status effects are significant across both samples with the exception of one model specification in the larger sample.

The likelihood of participating in the labour force rises as Indigenous people shift into more secure forms of housing tenure. Relative to subsidized rentals, the odds of labour force participation for Indigenous people are 93.1 to 105.4% greater for those residing in non-subsidized rentals and 88.7 and 119.2% greater for those residing in owned dwellings. These effects are always significant but smaller than when averaged over Indigenous and non-Indigenous people.

These tenure effects appear to support two studies reviewed by Steele and Kreda (2017). Here, the results support the idea that housing assistance (i.e., rent subsidies) supports employment outcomes, at least in terms of labour force participation.

Dwelling type does not appear to influence the labour force participation decision for Indigenous people, which is different from the case for non-Indigenous people. The dwelling type effects are only significant for the sparsest model specification for which these controls are included. In the results from the larger sample, the dwelling type effects are significant, except in one case. In addition, these effects switch from positive to negative as we move from the sparsest to more complex model specification.

Adequate and suitable housing do not appear to be associated with labour force participation for Indigenous people. The adequate housing effect is never significant, while the suitable housing effect is only significant in the sparsest model specification in which that control is included. These results seem to contrast with a study by Stephens (2010) on labour force participation in Australia, which found that Indigenous peoples residing in dwellings with "structural problems" were considerably less likely to join the workforce.

In contrast, affordable housing is positively and significantly associated with Indigenous labour force participation. The greater odds of participating in the labour force for Indigenous people residing in affordable housing lies between 19.8 and 30.7%. Still, this result could be spurious as there is the possibility that the association identified is due to reverse causality (i.e., those that participate in the labour force have higher incomes, which set them on a course to more affordable housing).[14] For similar reasons, we do not include a discussion of the effect of income in this section.

Residing in a multigenerational home does not appear to affect the labour force participation for Indigenous people, which differs from the case of non-Indigenous people. While the results from the restricted sample indicate that the estimated coefficients for multigenerational households are always negative, these effects are only significant in the sparsest model specification in which this control is included. In the larger sample, the estimated coefficients are also negative, but they are also larger and always significant.

Household size and structure are very influential on Indigenous labour force participation, yet the strength of these influences do not appear to be much different from the non-Indigenous experience. The odds of participating in the labour force for Indigenous people falls by between 17.6 and 22.4% for each additional

---

[14] The positive association between labour force participation and affordable housing is also present in the results for the larger sample, although the effect sizes are smaller by one-half or one-third in that case.

household member and by between 26.3 and 39.7% for each additional youth (15 to 18 years) in the household. The results from the larger sample indicate that the corresponding odds averaged over Indigenous and non-Indigenous people are a respective 16.1 to 20.5% and 34.3 to 47.9%.

The household size effects, which are significant across both samples and across all model specifications, is likely related to household scale economies (i.e., efficiencies from the sharing of household income and resources). The youth effects, which are significant across both samples and across all model specifications, are likely related to youth being preoccupied by schooling.[15]

In contrast to the effects from household size and youth in the home, Indigenous labour force participation is positively associated with the number of children and the number of household maintainers in the home. The odds of participating in the labour force for Indigenous people rises by between 7.9 and 13.7% for each additional child (0 to 18 years) in the household and by between 20.1 and 20.8% for each additional maintainer in the household. The additional child maintainer effects are very similar in size, respectively, and are always significant across both samples.

Geographic mobility plays some role in labour force participation for Indigenous peoples. Those that did not move within the last five years or that had moved within the same province within the last five years faced decreased odds of participating in the labour force, while those that did not move or only moved within the same community within the last year experienced greater odds of participating in the labour force. The effect of geographic setting, however, is insignificant.

In terms of comparative analysis, the results from the ordinary least squares (i.e., linear probability models) agree in sign with the results from the multivariate logistic regression models. In addition, nearly every significant effect in the multivariate logistic regression results is also significant in the ordinary least squares results.

The unadjusted R^2 in ordinary least squares is a measure of how well the independent variables collectively describe the dependent variable. The null model, which considers no variables at all, has an R^2 value of 0; a model that explains changes in perceived general health perfectly would have an R^2 value of 1. However, R^2 always increases as variables are added to a model specification. When we compare the value of R^2 between different model specifications, we can identify which groups of effects are explaining the most about the model.

In our models of Indigenous labour force participation, the R^2 values for ordinary least squares Models 1 through 4 are 0.082, 0.149, 0.211, and 0.214, respectively. There are substantial increases in R^2 at each step except for the one between Models 3 and 4, implying that there are multiple diverse factors contributing to our understanding of differences in labour force participation. This aligns with our findings from the logistic regression analysis.

It is worthwhile to note that the addition of geographic factors does not lead to a large increase in the goodness-of-fit (i.e., R2). This result suggests that geographic factors are not responsible for substantial share of the variation in labour force participation.

---

[15] Recall that youth aged 15 to 18 are included within this sample and that the results from subsection 4.1 indicate that youth school attendance rises with the number of youth in the home.

McFadden's pseudo-R^2 is a deviance-based measure designed to behave like the unadjusted R^2, but it applies to logistic regression models. The R^2 values for logistic Models 1 through 4 are 0.065, 0.124, 0.176, and 0.179, respectively. Here, again, we see a similar pattern of multiple increases, further confirming that both sets of models are behaving similarly.

Table 5.2.1: Labour Force Participation, Indigenous Individuals, 2016 – Part I

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4
	(Intercept)	1.346***	-4.310***	-3.474***	-3.251***
		(0.051)	(0.290)	(0.257)	(0.271)
Individual Socio-Demographic and Indigenous Characteristics	Age	-0.035***	-0.043***	-0.043***	-0.043***
		(0.001)	(0.001)	(0.001)	(0.001)
	Male	0.303***	0.277***	0.393***	0.396***
		(0.012)	(0.012)	(0.013)	(0.013)
	(Legally) Married	1.109***	0.833***	0.683***	0.698***
		(0.023)	(0.023)	(0.023)	(0.023)
	Common-Law	1.087***	0.877***	0.805***	0.805***
		(0.022)	(0.024)	(0.023)	(0.023)
	Separated	0.969***	1.083***	0.933***	0.932***
		(0.042)	(0.043)	(0.040)	(0.041)
	Divorced or Widowed	0.503***	0.529***	0.425***	0.423***
		(0.027)	(0.030)	(0.027)	(0.028)
	Inuit	-0.190***	0.339***	0.537***	0.389***
		(0.053)	(0.061)	(0.070)	(0.084)
	Métis or Other Indigenous	0.156***	0.083***	0.068***	0.037
		(0.020)	(0.018)	(0.020)	(0.019)
	Indigenous Citizenship	-0.119***	-0.032	-0.047	-0.078**
		(0.027)	(0.023)	(0.025)	(0.024)
	Registration Status	-0.118***	-0.075***	-0.051*	-0.055*
		(0.026)	(0.020)	(0.022)	(0.021)

Table 5.2.1: Labour Force Participation, Indigenous Individuals, 2016 – Part II

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4
Dwelling and Household Characteristics	Rented (Non-Subsidized)		0.720***	0.658***	0.694***
			(0.055)	(0.056)	(0.055)
	Owned		0.785***	0.635***	0.718***
			(0.060)	(0.056)	(0.056)
	Apartment		0.153***	-0.071	-0.018
			(0.039)	(0.037)	(0.036)
	Semi-Detached		0.162***	-0.020	0.030
			(0.043)	(0.042)	(0.040)
	Single-Detached		0.108**	-0.041	0.014
			(0.034)	(0.035)	(0.034)
	Adequate Housing		0.017	0.001	0.007
			(0.017)	(0.018)	(0.017)
	Suitable Housing		0.049*	0.017	0.046
			(0.025)	(0.024)	(0.024)
	Affordable Housing		0.181***	0.236***	0.268***
			(0.031)	(0.030)	(0.031)
	Total After-Tax Income		0.511***	0.367***	0.335***
			(0.033)	(0.030)	(0.032)
	Household Size		-0.253***	-0.198***	-0.194***
			(0.011)	(0.011)	(0.010)
	Children		0.128***	0.087***	0.076***
			(0.012)	(0.012)	(0.011)
	Youths		-0.506***	-0.318***	-0.305***
			(0.013)	(0.013)	(0.012)
	Household Maintainers		0.189***	0.184***	0.183***
			(0.011)	(0.012)	(0.011)
	Multigenerational Household		-0.075**	-0.020	-0.029
			(0.023)	(0.023)	(0.022)
Individual Human Capital Characteristics	Secondary School			1.012***	1.023***
				(0.020)	(0.020)
	Some Post-Secondary			1.426***	1.448***
				(0.023)	(0.023)
	Below Undergraduate			1.427***	1.436***
				(0.042)	(0.042)
	Undergraduate or Above			1.761***	1.785***
				(0.037)	(0.035)
	Deviance	1,196,769.55	1,121,208.95	1,054,537.41	1,051,009.67
	McFadden (Pseudo) R^2	0.065	0.124	0.176	0.179
	N	982,735	982,735	982,735	982,735

Note: The sample is restricted to Canadian-born, Indigenous people aged 15 years or older that resided outside of a reserve. Model 1 includes controls for individual socio-demographic and Indigenous characteristics. Model 2 adds controls for dwelling and household characteristics. Model 3 adds controls for individual human capital characteristics. Model 4 adds controls for geographic characteristics. Survey weights are used for the analysis. Cluster robust standard errors at the census subdivision level are in parentheses.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

Source: *2016 Census of Population* (Statistics Canada 2017b)

Table 5.2.2: Labour Force Participation, Indigenous and Non-Indigenous Individuals, 2016 – Part I

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4
	(Intercept)	2.280***	-2.205***	-1.470***	-1.668***
		(0.056)	(0.224)	(0.158)	(0.159)
Individual Socio-Demographic and Indigenous Characteristics	Age	-0.063***	-0.071***	-0.072***	-0.072***
		(0.002)	(0.001)	(0.001)	(0.001)
	Male	0.365***	0.361***	0.436***	0.435***
		(0.014)	(0.013)	(0.012)	(0.012)
	(Legally) Married	1.343***	1.223***	1.090***	1.082***
		(0.047)	(0.042)	(0.037)	(0.039)
	Common-Law	1.609***	1.445***	1.365***	1.369***
		(0.033)	(0.037)	(0.033)	(0.033)
	Separated	1.459***	1.571***	1.458***	1.457***
		(0.050)	(0.052)	(0.043)	(0.047)
	Divorced or Widowed	0.919***	0.975***	0.911***	0.908***
		(0.058)	(0.060)	(0.050)	(0.052)
	Inuit	-0.282***	0.413***	0.641***	0.342***
		(0.061)	(0.069)	(0.078)	(0.092)
	Métis or Other Indigenous	0.232***	0.164***	0.146***	0.104***
		(0.024)	(0.022)	(0.024)	(0.024)
	Non-Indigenous	0.371***	0.228***	0.118***	0.132***
		(0.022)	(0.018)	(0.023)	(0.022)
	Indigenous Citizenship	-0.149***	-0.055*	-0.067*	-0.116***
		(0.032)	(0.027)	(0.028)	(0.027)
	Registration Status	-0.120***	-0.075**	-0.048	-0.054*
		(0.029)	(0.024)	(0.025)	(0.025)

Table 5.2.2: Labour Force Participation, Indigenous and Non-Indigenous Individuals, 2016 – Part II

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4
Dwelling and Household Characteristics	Rented (Non-Subsidized)		1.033***	0.971***	0.999***
			(0.037)	(0.032)	(0.029)
	Owned		1.017***	0.846***	0.877***
			(0.034)	(0.028)	(0.028)
	Apartment		0.076**	-0.156***	-0.067***
			(0.029)	(0.020)	(0.019)
	Semi-Detached		0.066**	-0.120***	-0.044**
			(0.024)	(0.021)	(0.016)
	Single-Detached		0.030	-0.117***	-0.079***
			(0.018)	(0.017)	(0.015)
	Adequate Housing		-0.056***	-0.073***	-0.064***
			(0.008)	(0.008)	(0.007)
	Suitable Housing		0.125***	0.115***	0.127***
			(0.030)	(0.029)	(0.028)
	Affordable Housing		0.055	0.085**	0.105***
			(0.028)	(0.029)	(0.029)
	Total After-Tax Income		0.397***	0.259***	0.248***
			(0.028)	(0.022)	(0.021)
	Household Size		-0.229***	-0.185***	-0.176***
			(0.012)	(0.009)	(0.008)
	Children		0.132***	0.087***	0.075***
			(0.015)	(0.014)	(0.013)
	Youths		-0.652***	-0.425***	-0.420***
			(0.030)	(0.020)	(0.019)
	Household Maintainers		0.154***	0.149***	0.151***
			(0.009)	(0.009)	(0.009)
	Multigenerational Household		-0.129***	-0.050*	-0.045*
			(0.020)	(0.020)	(0.019)
Individual Human Capital Characteristics	Secondary School			1.080***	1.091***
				(0.022)	(0.022)
	Some Post-Secondary			1.529***	1.547***
				(0.033)	(0.032)
	Below Undergraduate			1.383***	1.398***
				(0.037)	(0.037)
	Undergraduate or Above			1.656***	1.693***
				(0.049)	(0.050)
	Deviance	22,099,161.12	21,166,566.39	20,091,670.62	20,041,558.21
	McFadden (Pseudo) R^2	0.160	0.196	0.237	0.239
	N	20,645,125	20,645,125	20,645,125	20,645,125

Note: The sample is restricted to Canadian-born, Indigenous and non-Indigenous people aged 15 years or older that resided outside of a reserve. Model 1 includes controls for individual socio-demographic and Indigenous characteristics. Model 2 adds controls for dwelling and household characteristics. Model 3 adds controls for individual human capital characteristics. Model 4 adds controls for geographic characteristics. Survey weights are used for the analysis. Cluster robust standard errors at the census subdivision level are in parentheses.

*** p < 0.001, ** p < 0.01, * p < 0.05

Source: *2016 Census of Population* (Statistics Canada 2017b)

5.3 Full-Time Work Status

Table 5.3.1 presents the results of the multivariate logistic regression analysis for the sample restricted to Indigenous individuals alone. Table 5.3.2 presents the corresponding results for the larger sample that includes both Indigenous and non-Indigenous individuals. The results are discussed in terms of odds ratios.

The results suggest that the likelihood of transitioning into full-time work systematically differs both as a whole and in terms of dwelling and household factors between Indigenous and non-Indigenous workers. These findings, along with their policy implications, are highlighted further through a comparison of the results from the two samples.

Older Indigenous workers are more likely to work full-time jobs. For each additional year of age, the odds of working full time for an Indigenous person increases by a highly significant 2.2%.[16] This rate is slightly larger than for non-Indigenous workers (i.e., a highly significant 1.0% per additional year of age).

Indigenous male workers have greater likelihood of working full time relative to female workers. Indigenous male workers have a greater odds of full time work of between 101.8 and 137.5%. This is similar to the odds when averaged over Indigenous and non-Indigenous workers. Here, male workers have greater odds that fall between 121.9 and 156.3%. These effects are always significant regardless of the sample.

Indigenous identity group effects provide additional evidence of the systematic differences in full time work amongst Indigenous workers. In the sample restricted to Indigenous workers, the results indicate that the Inuit have between a 2.6 and 34.0% greater odds of working full time relative to First Nations workers. In the larger sample, the corresponding odds fall between 0.7 and 50.7%. The lowest odds for the Inuit are found in the sparsest model specifications of the two samples, where they are coincidentally not significant at conventional levels.

Workers of Métis or other Indigenous identity, on the other hand, experience no such change in their likelihood of working full time. Compared to First Nation workers, the odds are between 5.2% lower and 2.2% greater in the restricted sample and between 1.0% lower and 3.3% greater in the larger sample. Non-Indigenous workers have a similar corresponding odds of full-time work of between 4.7% lower and 6.0% higher. Yet, the Métis or Other Indigenous identity group effects are only significant for the fullest model specification, while the non-Indigenous identity group effects are significant for all but the second sparsest model specification.

Indigenous citizenship and registration status have no clear association with full-time work status. While their effects are always positive, only the Indigenous citizenship effect is significant, and that only occurs in two out of four model specifications with the larger sample.

The likelihood of having full-time work rises as Indigenous workers shift into more secure forms of housing tenure. Relative to subsidized rentals, the odds of having full-time work for Indigenous workers are 61.4 to 72.1% greater for those residing in non-subsidized rentals and 30.6 to 46.8% greater for those residing in owned dwellings. These effects are always significant and even larger when averaged over Indigenous and

---

[16] The point estimate of 0.021 is transformed into an odds ratio (i.e., $\exp(0.021) - 1 = 0.021$).

non-Indigenous workers. Corresponding with Munch, Rosholm, and Svarer (2006), the positive effects of homeownership on full-time work status could be due to localized matching of skills and needs between workers and firms and because of workers accepting lower wages in the face of the high costs of moving for (full-time) work.

Dwelling type does not appear to influence the likelihood of working full time for Indigenous workers, which is different from the case for non-Indigenous workers. Only the semi-detached dwelling type effect is significant, and that only occurs for the sparsest model specification for which these controls are included. In the results from the larger sample, the dwelling type effects are significant in four of nine cases. Yet, these effects switch from positive to negative between model specifications without an obvious pattern.

Adequate and affordable housing are positively associated with full-time work status for Indigenous workers, while suitable housing has a negative association. Indigenous workers in adequate housing have 7.5 to 11.0% greater odds of working full time. The corresponding odds for affordable housing are a larger 45.2 and 47.3%. At the same time, the odds of working full-time for Indigenous workers in suitable housing are between 9.2 and 12.5% lower. All of these housing effects are highly significant for all model specifications and in both samples.

One possible explanation for these seemingly contradictory effects could be differences in family structure for those with full-time work relative to those with part-time work (i.e., differences in family size and multigenerational structure). There may be some offsetting effects from having housing that is both suitable and adequate. When including non-Indigenous workers as well, the negative association with suitable housing remains, but the positive effect of adequate housing is much smaller.

Although indirectly, the results for adequate housing may support a study by Stephens (2010) on labour force participation in Australia. In that case, Indigenous peoples residing in dwellings without "structural problems" were more likely to be employed.

As was noted for a similar association between labour force participation and affordable housing, the affordable housing result could be spurious as there is the possibility that this association is due to reverse causality (i.e., those that work full time have higher incomes, which set them on a course to more affordable housing). For similar reasons, we do not include a discussion of the effect of income in this section.

Residing in a multigenerational home increases the odds of full-time work for Indigenous workers by between 27.4 and 31.5%. These odds align with the case of non-Indigenous workers. This effect is highly significant for all model specifications and in both samples.

Household size and structure are very influential on Indigenous full-time status, yet the strength of these influences do not appear to be much different from the non-Indigenous experience. The odds of working full time for Indigenous workers falls by between 18.1 and 23.5% for each additional household member and by between 31.1 and 40.0% for each additional youth (15 to 18 years) in the household.

Again, as was noted for similar associations between household size, youth effects, and labour force participation, the household size effects, which are significant across both samples and across all model specifications, is likely related to household scale economies (i.e., efficiencies from the sharing of

94

household income and resources). The youth effects, which are significant across both samples and across all model specifications, are likely related to youth being preoccupied by schooling.[17]

The number of children and the number of household maintainers in the home both positively influence full-time work status for Indigenous workers. The odds rise by between 20.0 and 28.8% for each additional child (0 to 18 years) in the household, which offsets the effect of additional youths, and the odds rise by between 8.5 and 9.9% for each additional household maintainer. All of these effects are significant for all model specifications and for both samples.

In terms of geographic factors, the result suggests that geographic setting and a lack of mobility play some role in full-time work status. Those residing in semi-rural and urban areas faced a greater likelihood of working full time, while those that did not move in the last year or last five years faced a lower likelihood of working full time.

In terms of comparative analysis, the results from the ordinary least squares (i.e., linear probability models) agree in sign with the results from the multivariate logistic regression models. In addition, nearly every significant effect in the multivariate logistic regression results is also significant in the ordinary least squares results.

The unadjusted R^2 in ordinary least squares is a measure of how well the independent variables collectively describe the dependent variable. The null model, which considers no variables at all, has an R^2 value of 0; a model that explains changes in perceived general health perfectly would have an R^2 value of 1. However, R^2 always increases as variables are added to a model specification. When we compare the value of R^2 between different model specifications, we can identify which groups of effects are explaining the most about the model.

It is worthwhile to note that the addition of geographic factors does not lead to a large increase in the goodness-of-fit (i.e., R2). This result suggests that geographic factors are not responsible for a substantial share of the variation in full-time work status.

In our models of Indigenous full-time work status, the R^2 values for ordinary least squares Models 1 through 4 are 0.079, 0.114, 0.152, and 0.156, respectively. There are substantial increases in R^2 at each step except for the one between Models 3 and 4, implying that there are multiple diverse factors contributing to our understanding of differences in full-time work status. This aligns with our findings from the logistic regression analysis.

McFadden's pseudo-R^2 is a deviance-based measure designed to behave like the unadjusted R^2, but it applies to logistic regression models. The R^2 values for logistic Models 1 through 4 are 0.073, 0.104, 0.143, and 0.147, respectively. Here we see the same pattern of multiple increases, further confirming that both sets of models are behaving similarly.

---

[17] Recall that youth aged 15 to 18 are included within this sample and that the results from subsection 4.1 indicate that youth school attendance rises with the number of youth in the home.

Table 5.3.1: Full-Time Work Status, Indigenous Workers, 2016 – Part I

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4
	(Intercept)	-0.516***	-4.003***	-2.612***	-2.417***
		(0.037)	(0.308)	(0.230)	(0.253)
Individual Socio-Demographic and Indigenous Characteristics	Age	0.025***	0.022***	0.019***	0.021***
		(0.001)	(0.001)	(0.001)	(0.001)
	Male	0.840***	0.865***	0.699***	0.702***
		(0.023)	(0.023)	(0.021)	(0.020)
	(Legally) Married	0.665***	0.569***	0.464***	0.456***
		(0.026)	(0.026)	(0.026)	(0.026)
	Common-Law	0.780***	0.628***	0.557***	0.516***
		(0.027)	(0.027)	(0.027)	(0.027)
	Separated	0.630***	0.641***	0.578***	0.550***
		(0.050)	(0.049)	(0.049)	(0.049)
	Divorced or Widowed	0.359***	0.325***	0.278***	0.251***
		(0.035)	(0.034)	(0.035)	(0.036)
	Inuit	0.026	0.259***	0.293***	0.231***
		(0.075)	(0.068)	(0.068)	(0.064)
	Métis or Other Indigenous	0.022	0.004	-0.014	-0.053**
		(0.021)	(0.021)	(0.021)	(0.020)
	Indigenous Citizenship	0.026	0.053	0.045	0.026
		(0.028)	(0.029)	(0.030)	(0.030)
	Registration Status	0.024	0.033	0.032	0.025
		(0.028)	(0.028)	(0.029)	(0.029)

Table 5.3.1: Full-Time Status, Indigenous Workers, 2016 – Part II

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4
Dwelling and Household Characteristics	Rented (Non-Subsidized)			0.543***	0.500***
				(0.041)	(0.040)
	Owned			0.384***	0.267***
				(0.041)	(0.040)
	Apartment			0.080	-0.008
				(0.053)	(0.055)
	Semi-Detached			0.139*	0.053
				(0.062)	(0.063)
	Single-Detached			0.027	-0.077
				(0.055)	(0.056)
	Adequate Housing			0.104***	0.095***
				(0.024)	(0.025)
	Suitable Housing			-0.133***	-0.133***
				(0.028)	(0.030)
	Affordable Housing			0.375***	0.373***
				(0.033)	(0.027)
	Total After-Tax Income			0.316***	0.239***
				(0.033)	(0.023)
	Household Size			-0.268***	-0.222***
				(0.013)	(0.012)
	Children			0.253***	0.206***
				(0.015)	(0.014)
	Youths			-0.510***	-0.399***
				(0.016)	(0.017)
	Household Maintainers			0.082***	0.094***
				(0.012)	(0.012)
	Multigenerational Household			0.242***	0.274***
				(0.031)	(0.032)
Individual Human Capital Characteristics	Secondary School			0.467***	0.476***
				(0.023)	(0.024)
	Some Post-Secondary			0.695***	0.701***
				(0.023)	(0.023)
	Below Undergraduate			0.678***	0.682***
				(0.051)	(0.051)
	Undergraduate or Above			0.901***	0.894***
				(0.036)	(0.035)
	Deviance	584,068.26	564,539.19	539,659.24	537,092.01
	McFadden (Pseudo) R²	0.073	0.104	0.143	0.147
	N	588,595	588,595	588,595	588,595

Note: The sample is restricted to Canadian-born, Indigenous workers aged 15 years or older that resided outside of a reserve. Model 1 includes controls for individual socio-demographic and Indigenous characteristics. Model 2 adds controls for dwelling and household characteristics. Model 3 adds controls for individual human capital characteristics. Model 4 adds controls for geographic characteristics. Cluster robust standard errors at the census subdivision level are in parentheses.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

Source: *2016 Census of Population* (Statistics Canada 2017b)

Table 5.3.2: Full-Time Work Status, Indigenous and Non-Indigenous Workers, 2016 – Part I

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4
	(Intercept)	-0.278***	-2.915***	-1.786***	-1.785***
		(0.035)	(0.144)	(0.106)	(0.108)
Individual Socio-Demographic and Indigenous Characteristics	Age	0.014***	0.009***	0.006***	0.009***
		(0.001)	(0.001)	(0.001)	(0.001)
	Male	0.907***	0.941***	0.797***	0.798***
		(0.033)	(0.030)	(0.026)	(0.026)
	(Legally) Married	0.833***	0.802***	0.696***	0.652***
		(0.033)	(0.030)	(0.026)	(0.030)
	Common-Law	1.188***	1.027***	0.946***	0.894***
		(0.035)	(0.038)	(0.035)	(0.033)
	Separated	0.927***	0.914***	0.863***	0.796***
		(0.045)	(0.041)	(0.036)	(0.041)
	Divorced or Widowed	0.612***	0.556***	0.536***	0.493***
		(0.047)	(0.045)	(0.040)	(0.043)
	Inuit	0.007	0.385***	0.410***	0.304***
		(0.076)	(0.075)	(0.076)	(0.080)
	Métis or Other Indigenous	0.032	0.019	-0.003	-0.010
		(0.021)	(0.021)	(0.021)	(0.020)
	Non-Indigenous	0.058**	0.018	-0.048**	-0.036*
		(0.021)	(0.019)	(0.018)	(0.016)
	Indigenous Citizenship	0.039	0.071*	0.066*	0.057
		(0.029)	(0.031)	(0.032)	(0.032)
	Registration Status	0.023	0.039	0.042	0.035
		(0.029)	(0.028)	(0.030)	(0.030)

99

Table 5.3.2: Full-Time Status, Indigenous and Non-Indigenous Workers, 2016 – Part II

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4
Dwelling and Household Characteristics	Rented (Non-Subsidized)		0.758***	0.686***	0.659***
			(0.036)	(0.034)	(0.030)
	Owned		0.666***	0.511***	0.571***
			(0.034)	(0.032)	(0.028)
	Apartment		0.098**	-0.024	0.003
			(0.031)	(0.025)	(0.022)
	Semi-Detached		0.113***	0.017	0.027
			(0.023)	(0.023)	(0.021)
	Single-Detached		-0.021	-0.131***	-0.112***
			(0.019)	(0.020)	(0.019)
	Adequate Housing		0.038***	0.025*	0.019*
			(0.010)	(0.010)	(0.009)
	Suitable Housing		-0.130***	-0.140***	-0.112***
			(0.026)	(0.025)	(0.025)
	Affordable Housing		0.386***	0.388***	0.397***
			(0.016)	(0.015)	(0.020)
	Total After-Tax Income		0.239***	0.187***	0.188***
			(0.011)	(0.007)	(0.007)
	Household Size		-0.311***	-0.281***	-0.256***
			(0.013)	(0.012)	(0.011)
	Children		0.314***	0.270***	0.252***
			(0.018)	(0.017)	(0.018)
	Youths		-0.574***	-0.442***	-0.421***
			(0.011)	(0.010)	(0.010)
	Household Maintainers		0.076***	0.089***	0.080***
			(0.008)	(0.007)	(0.007)
	Multigenerational Household		0.243***	0.292***	0.264***
			(0.016)	(0.016)	(0.014)
Individual Human Capital Characteristics	Secondary School			0.410***	0.409***
				(0.021)	(0.022)
	Some Post-Secondary			0.751***	0.747***
				(0.030)	(0.029)
	Below Undergraduate			0.707***	0.710***
				(0.032)	(0.031)
	Undergraduate or Above			0.916***	0.900***
				(0.029)	(0.029)
	Deviance	12,515,158.33	12,093,939.46	11,549,858.39	11,515,323.91
	McFadden (Pseudo) R^2	0.079	0.110	0.150	0.153
	N	13,176,955	13,176,955	13,176,955	13,176,955

Note: The sample is restricted to Canadian-born, Indigenous and non-Indigenous workers aged 15 years or older that resided outside of a reserve. Model 1 includes controls for individual socio-demographic and Indigenous characteristics. Model 2 adds controls for dwelling and household characteristics. Model 3 adds controls for individual human capital characteristics. Model 4 adds controls for geographic characteristics. Survey weights are used for the analysis. Cluster robust standard errors at the census subdivision level are in parentheses.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

Source: *2016 Census of Population* (Statistics Canada 2017b)

5.4 Job Satisfaction

Table 5.4.1 presents the results of the multivariate logistic regression analysis for the sample restricted to Indigenous workers alone. Due to a lack of data, comparisons cannot be made with non-Indigenous workers. The results are discussed in terms of odds ratios.

Neither being older or being male appear to have any influence on job satisfaction. Although the age effect varies from negative to positive across the model specifications and the male effect is always negative, neither effect is ever significant.

There is no discernible difference between Indigenous identity groups in the odds of a worker being satisfied with their job Indigenous identity groups. The effect for the Inuit identity group and the effect for the Métis or Other Indigenous identity group are never significant at conventional levels.

Likewise, there is no discernible difference in the odds based on Indigenous citizenship or registration status. The Indigenous citizenship effect is always positive but only significant in the sparsest model specification. The registration effect is always negative but never significant.

Tenure also appears to have no influence over job satisfaction. While the odds of being satisfied with their job for Indigenous workers residing in non-subsidized rentals is always lower than those residing in subsidized rentals, these effects are never significant. The job satisfaction effects from ownership vary from positive to negative across the model specifications, yet they are never significant.

Dwelling type does not appear to influence the likelihood of job satisfaction for Indigenous workers, which is different from the case for non-Indigenous workers. Although all of the dwelling type effects are always positive, they are never significant.

Indigenous workers with adequate housing are substantially more likely to be satisfied with their jobs. The odds of reporting job satisfaction for Indigenous workers are between 52.8 and 58.7% greater when compared to those in inadequate housing. This effect increases slightly with increasing model specification complexity. The effect is also significant throughout.

Suitable and affordable housing do not appear to influence job satisfaction for Indigenous workers. While the suitable housing effects are alway negative and the affordable housing effects are always positive, they are never significant. Separately, higher incomes lead to greater job satisfaction for Indigenous workers. With each doubling of total household after-tax income, the odds of being satisfied with their job for Indigenous workers increases by 7.4 to 7.5%. This effect is highly significant across all model specifications. One possible explanation for the household income effect is that higher incomes for other household members reduce the pressure on income from any individual household member (i.e., household scale economies), which reduces the pressure to find a satisfactory job.[18]

Household composition is highly influential on job satisfaction outcomes. The likelihood of job satisfaction for Indigenous workers rises with household size, but it is lower for those in multigenerational households.

---

[18] The results additionally point out that full-time workers are more satisfied with their jobs relative to part-time workers.

The odds of an Indigenous worker being satisfied with their job rises by 10.1 to 11.3% for each additional household member. On the other hand, the odds of Indigenous workers being satisfied with their job are between 50.5 and 51.9% lower for those residing in multigenerational households. The household size and multigenerational household effects are significant across all model specifications.

As noted in subsections 5.1 and 5.2, the association between household size and job satisfaction may be related to household scale economies (i.e., efficiencies from the sharing of household income and resources). However, this appears to be less likely in this case given that there is no discernible influence on job satisfaction from residing with additional household maintainers.

Geographic factors do not appear to be influential on job satisfaction for Indigenous workers. None of the regional, geographic setting, or mobility effects are significant.

In terms of comparative analysis, the results from the ordinary least squares (i.e., linear probability models) agree in sign with the results from the multivariate logistic regression models. In addition, nearly every significant effect in the multivariate logistic regression results is also significant in the ordinary least squares results.

The unadjusted R^2 in ordinary least squares is a measure of how well the independent variables collectively describe the dependent variable. The null model, which considers no variables at all, has an R^2 value of 0; a model that explains changes in perceived general health perfectly would have an R^2 value of 1. However, R^2 always increases as variables are added to a model specification. When we compare the value of R^2 between different model specifications, we can identify which groups of effects are explaining the most about the model.

It is worthwhile to note that the addition of geographic factors does not lead to a large increase in the goodness-of-fit (i.e., R2). This result suggests that geographic factors are not responsible for a substantial share of the variation in job satisfaction.

In our models of job satisfaction, the R^2 values for ordinary least squares Models 1 through 4 are 0.008, 0.016, 0.024, and 0.028, respectively. There are only small increases in R^2 at each step, implying that the variables in these models have limited utility in explaining differences in job satisfaction. This aligns with the relatively small effect sizes found in the logistic regression analysis.

McFadden's pseudo-R^2 is a deviance-based measure designed to behave like the unadjusted R^2, but it applies to logistic regression models. The R^2 values for logistic Models 1 through 4 are 0.002, 0.014, 0.027, and 0.033, respectively. Here we see the same pattern of small increases, further confirming that both sets of models are behaving similarly.

Table 5.4.1: Individual's Job Satisfaction, Indigenous Workers, 2017 — Part I

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4
	(Intercept)	1.903***	-0.036	0.134	-0.263
		(0.167)	(0.563)	(0.546)	(0.619)
Individual Socio-Demographic and Indigenous Characteristics	Age	-0.000	0.004	0.002	-0.001
		(0.004)	(0.005)	(0.005)	(0.004)
	Male	-0.099	-0.120	-0.167	-0.177
		(0.087)	(0.088)	(0.095)	(0.094)
	(Legally) Married	0.549***	0.299	0.227	0.261
		(0.160)	(0.156)	(0.157)	(0.146)
	Common-Law	0.465**	0.341*	0.240	0.283*
		(0.146)	(0.148)	(0.146)	(0.144)
	Separated	0.009	-0.003	-0.096	-0.003
		(0.268)	(0.276)	(0.276)	(0.270)
	Divorced or Widowed	-0.053	-0.032	-0.073	-0.025
		(0.272)	(0.270)	(0.266)	(0.251)
	Inuit	0.197	0.173	0.073	-0.029
		(0.154)	(0.183)	(0.178)	(0.188)
	Métis or Other Indigenous	0.083	0.061	0.035	0.032
		(0.112)	(0.114)	(0.114)	(0.112)
	Indigenous Citizenship	0.304*	0.277	0.268	0.272
		(0.142)	(0.142)	(0.141)	(0.140)
	Registration Status	-0.062	-0.033	-0.068	-0.087
		(0.151)	(0.145)	(0.145)	(0.146)

Table 5.4.1: Individual's Job Satisfaction, Indigenous Workers, 2017 — Part II

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4
Dwelling and Household Characteristics	Rented (Unsubsidized)		-0.197	-0.227	-0.182
			(0.215)	(0.218)	(0.225)
	Owned		0.001	-0.003	-0.034
			(0.202)	(0.208)	(0.212)
	Apartment		0.213	0.281	0.388
			(0.339)	(0.331)	(0.349)
	Semi-Detached		0.046	0.090	0.212
			(0.337)	(0.332)	(0.347)
	Single-Detached		0.210	0.210	0.210
			(0.304)	(0.300)	(0.303)
	Adequate Housing		0.424**	0.443**	0.462**
			(0.149)	(0.145)	(0.141)
	Suitable Housing		-0.057	-0.012	-0.007
			(0.145)	(0.143)	(0.148)
	Affordable Housing		0.118	0.054	0.043
			(0.163)	(0.157)	(0.156)
	Total After-Tax Income		0.105**	0.103**	0.104**
			(0.036)	(0.036)	(0.036)
	Household Size		0.096*	0.107*	0.099*
			(0.042)	(0.042)	(0.042)
	Household Maintainers		0.008	0.009	0.024
			(0.081)	(0.083)	(0.084)
	Multigenerational Household		-0.704***	-0.731***	-0.721***
			(0.190)	(0.194)	(0.192)
Individual Human Capital Characteristics	Secondary School			-0.232	-0.205
				(0.161)	(0.159)
	Some Post-Secondary			-0.290	-0.243
				(0.193)	(0.188)
	Below Undergraduate			0.028	0.070
				(0.146)	(0.152)
	Undergraduate or Above			-0.380*	-0.291
				(0.171)	(0.181)
	Deviance	331,868	327,797	323,614	321,524
	McFadden (Pseudo) R^2	0.002	0.014	0.027	0.033
	N	545,330	545,330	545,330	545,330

Note: The sample is restricted to Canadian-born, Indigenous people aged 15 years or older that resided outside of a reserve. Model 1 includes controls for individual socio-demographic and Indigenous characteristics. Model 2 adds controls for dwelling and household characteristics. Model 3 adds controls for individual human capital and labour market characteristics. Model 4 adds controls for geographic characteristics. Cluster robust standard errors at the census subdivision level are in parentheses.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

Source: *2017 Aboriginal Peoples Survey* (Statistics Canada 2018)

6.0 Indigenous Language

Key Findings

- The likelihood of speaking an Indigenous language regularly at home falls with more secure housing tenure (i.e., homeownership).
- Residing in affordable housing or in multigenerational households do not appear to increase or decrease the likelihood of an Indigenous child regularly speaking an Indigenous language at home.
- Household composition factors do not appear to influence the regular usage of Indigenous languages at home for Indigenous children.
- Indigenous children are much more likely to speak one at home regularly if their primary household maintainer has an Indigenous mother tongue.

The following list presents the background characteristics as indicated by the literature review that explain language outcomes (i.e., regular Indigenous language usage at home for children aged 1 to 18 years). These characteristics are broken down by category.

Child's Socio-Demographic and Indigenous Characteristics:
- Sex
- Age
- Indigenous identity
- Indigenous citizenship
- Registration status

Dwelling and Household Characteristics:
- Housing tenure
- Dwelling type
- Housing adequacy
- Housing suitability
- Housing affordability
- Household income
- Household size
- Number of children aged 0 to 18 in the household, including the child
- Number of youths in the household aged 15 to 18 years
- Multigenerational household status
- Number of household maintainers
- Multigenerational status

Primary Household Maintainer Socio-Demographic and Indigenous Characteristics:
- Sex
- Age
- Marital status
- Indigenous identity
- Indigenous citizenship
- Registration status

Primary Household Maintainer Human Capital and Labour Market Characteristics:
- Highest level of schooling
- Indigenous mother tongue status
- Labour force status
- Full-time work status
- Industry

Geographic:
- Province / territory
- Geographic setting
- 1-year mobility status
- 5-year mobility status

6.1 Indigenous Language Usage at Home Data and Analysis

We use a single sample based on the Census for the analysis of a single language outcome: *Regular Indigenous Language Usage at Home*. This sample is restricted to Canadian-born, Indigenous children aged 1 to 18 years that resided outside of a reserve with a primary household maintainer aged 19 years or older.

We use five model specifications to analyze the simultaneous influence of multiple factors on *Regular Indigenous Language Usage at Home*. Model 1 examines the influence of the child's socio-demographic and Indigenous characteristics. This model controls for *Age*, *Sex*, *Indigenous Identity Group*, *Indigenous Citizenship*, and *Registration Status*.[19]

Model 2 builds on the first model by also examining the influence of dwelling and household characteristics. Dwelling characteristics include *Tenure*, *Dwelling Type*, *Adequate Housing*, *Affordable Housing*, and *Suitable Housing*. Household characteristics include *Household Total After-Tax Income*, *Household Size*, *Number of Children*, *Number of Youths*, *Number of Household Maintainers*, and *Multigenerational Household Status*.

Model 3 adds the primary household maintainer's socio-demographic and Indigenous characteristics to Model 2. These characteristics include the same characteristics as for the child in Model 1 (i.e., *Age*, *Sex*, *Indigenous Identity Group*, *Indigenous Citizenship*, and *Registration Status*), along with the primary household maintainer's *Marital Status*.

Model 4 adds the primary household maintainer's human capital and labour market characteristics to Model 3. These characteristics include *Highest Level of Schooling*, *Indigenous Mother Tongue*, *Labour Force Status*, *Full-Time Work Status*, and *Industry of Employment*.

Lastly, Model 5 adds geographic characteristics to Model 4. These characteristics include *Region*, *Geographic Setting*, *1-Year Mobility Status*, and *5-Year Mobility Status*.

The primary estimation method used is weighted multivariate logistic regression, with the weights based on survey weights provided by Statistics Canada in the microdata. Multivariate logistic regression is an extension of multivariate least squares regression developed for binary responses. For comparative analysis, the models were also estimated using ordinary least squares (i.e., as linear probability models), although these results are not shown here.

In all of the model specifications, we use robust standard errors clustered on the census subdivision. This approach is taken, in part, to account for the variation in school attendance that is due to unobserved community-level characteristics, such as investments in school infrastructure.

---

[19] Indigenous citizenship is based on First Nation citizenship or band membership. In this case, Métis citizenship is not included in the definition of Indigenous citizenship. Contrary to the APS, the Census does not include a variable corresponding to the holding of a Métis identity card or certificate.

6.2 Indigenous Language Usage at Home

Table 6.2.1 presents the results of the multivariate logistic regression analysis for the sample restricted to Indigenous individuals alone. The results are discussed in terms of odds ratios.

The results weakly suggest that the age of the Indigenous child has a negative influence on their likelihood of speaking an Indigenous language regularly at home. There is an indication, however, that the age of the child's primary household maintainer negatively influences this likelihood. The age effect for the Indigenous child varies from a 1.7% lower odds to a 0.5% greater odds but is only significant in the sparsest model specification.[20]

The age effect for the primary household maintainer and its significance grows with model specification complexity from a 0.1 to 1.1% lower odds. This result could be related to the loss of Indigenous language in older generations as a result of residential schools.

Indigenous children that are male are slightly less likely to use an Indigenous language regularly at home. The odds of a male Indigenous child speaking an Indigenous language at home are between 11.0 and 12.3% less than the case for female Indigenous children. The male effect is always highly significant. There is no corresponding male primary household maintainer effect.

Inuit children have the greatest likelihood of regularly using an Indigenous language at home of all Indigenous identity groups. Intriguingly, having an Inuit primary household maintainer actually decreases the odds of children using an Indigenous language regularly at home. The odds of speaking an Indigenous language regularly at home are between 1,067 and 2,201% greater for Inuit children relative to First Nations children. At the same time, the odds of Indigenous children with an Inuit primary household maintainer speaking an Indigenous language regularly at home is between 10.0 and 68.8% lower relative to First Nations primary household maintainers. The Inuit child effect is always significant, while the Inuit primary household maintainer effect is only significant in the two most complex model specifications.

Children of Métis or other Indigenous identity are less likely to speak an Indigenous language regularly at home. Contrary to the case of Inuit primary household maintainers, Indigenous language usage is not influenced by having a primary household maintainer of Métis or other Indigenous identity. The odds of a child of Métis or other Indigenous identity regularly speaking an Indigenous language at home are between 49.2 and 59.3% lower relative to First Nations. The Métis or other Indigenous child effect is always significant but the corresponding primary household maintainer effect is never significant.

Indigenous language usage at home is much more common among Indigenous citizens and those with registration status. Indigenous children with Indigenous citizenship have a 111.3 to 215.8% greater odds of regularly speaking an Indigenous language at home. This effect is smaller in more complex models, while being significant throughout all model specifications. Indigenous children with registration status have a 40.8 to 91.4% greater odds of speaking an Indigenous language regularly at home. This effect is always significant, but it is smaller in magnitude in more complex model specifications. One explanation could be

---

[20] The point estimate of –0.017 is transformed into an odds ratio (i.e., $\exp(-0.017) - 1 = -0.017$).

that Indigenous people with citizenship, including those with registration status, may have greater cultural continuity through their ties to an Indigenous Nation or community.

Intriguingly, there is no corresponding Indigenous citizenship or registration effect for primary household maintainers. The primary household maintainer citizenship and registration effects, while always positive, are never significant.

The likelihood of speaking an Indigenous language regularly at home is the greatest for Indigenous children in subsidized rentals, followed by those in non-subsidized dwellings and then those in owned dwellings. The odds for an Indigenous child residing in a non-subsidized rented and owned dwellings are a respective 16.3 to 29.9% and 20.7 to 50.9% lower than those residing in subsidized rentals. The magnitudes and significance of these effects fall with more complex model specifications, with neither being significant in the model specification with the greatest complexity.

Dwelling type does not appear to influence the odds of an Indigenous child speaking an Indigenous language regularly at home. None of the dwelling type effects are significant at conventional levels.

Indigenous children residing in adequate housing are less likely to speak an Indigenous language regularly at home. The same may also be true for Indigenous children residing in suitable housing. There is no discernible effect from affordable housing nor from multigenerational households.

Having adequate housing is associated with a 20.6 to 31.7% decreased odds of using an Indigenous language regularly at home. This association is significant in all four model specifications in which this control is included. Those in suitable homes have 5.9 to 27.6% lower odds of speaking an Indigenous language regularly at home. This effect is significant in the two sparsest model specifications in which this control is included (i.e., the model specifications that do not include controls for the primary household maintainer's socio-demographic and Indigenous characteristics, the primary household maintainer's human capital and labour market characteristics, including mother tongue, and geographic characteristics).

The negative tenure, adequate housing, and suitable housing effects may relate to geographic factors. For instance, residing in neighbourhoods with dense subsidized housing complexes could be highly correlated with residing in neighbourhoods with many other Indigenous people. As a result, children may have reinforcing language opportunities outside of the home.

Residing in affordable housing or in multigenerational households do not appear to increase or decrease the likelihood of an Indigenous child regularly speaking an Indigenous language at home. Likewise, household composition effects do not appear to be influential factors. The effect for affordable housing is always negative and the effect for multigenerational households is always negative. Nonetheless, yet neither effect is ever significant. The effects for the numbers of household members, children, youths, and maintainers vary from positive to negative, but they are never significant.

At most, the multigenerational household results do not support the implications presented by Cantoni (2007) with respect to Indigenous language learning processes. At the same time, we are unable to control for other Indigenous cultural contexts that may be necessary complements to the Indigenous language usage.

109

The household composition results provide a counterpoint to Guèvremont and Kohen (2012), who found that Indigenous language usage for First Nations children rose with household size. Yet, the household composition results do not support the findings of a negative association between Indigenous language usage and household size by Findlay and Kohen (2012).

Nonetheless, Indigenous children are much more likely to speak one at home regularly if their primary household maintainer has an Indigenous mother tongue. In this case, the odds of speaking an Indigenous language regularly at home are 220 to 254.7% greater.

Geographic effects, which are not shown, are also important. For instance, Indigenous children residing in one of the three territories have much greater odds of speaking an Indigenous language regularly at home. A lack of 1-year and 5-year mobility also raises these odds. Residence in non-rural settings lower the odds.

In terms of comparative analysis, the results from the ordinary least squares (i.e., linear probability models) agree in sign with the results from the multivariate logistic regression models. In addition, nearly every significant effect in the multivariate logistic regression results is also significant in the ordinary least squares results.

The unadjusted R^2 in ordinary least squares is a measure of how well the independent variables collectively describe the dependent variable. The null model, which considers no variables at all, has an R^2 value of 0; a model that explains changes in perceived general health perfectly would have an R^2 value of 1. However, R^2 always increases as variables are added to a model specification. When we compare the value of R^2 between different model specifications, we can identify which groups of effects are explaining the most about the model.

It is worthwhile to note that the addition of geographic factors does not lead to a large increase in the goodness-of-fit (i.e., R2). This result suggests that geographic factors are not responsible for a substantial share of the variation in regular Indigenous language usage at home by children.

In our models of Indigenous language usage at home, the R^2 values for ordinary least squares Models 1 through 5 are 0.048, 0.053, 0.058, 0.072, and 0.087, respectively. There is a substantial increase from the null model to Model 1, and relatively small increases thereafter, implying that the variables in Model 1 (personal characteristics) contribute the most to our understanding of differences in Indigenous language usage at home. This aligns with our findings about the identity group effects from the logistic regression analysis.

McFadden's pseudo-R^2 is a deviance-based measure designed to behave like the unadjusted R^2, but it applies to logistic regression models. The R^2 values for logistic Models 1 through 5 are 0.148, 0.162, 0.182, 0.210, and 0.234, respectively. Here we see a divergence between the linear and logistic models in that the increase in R^2 from the null to Model 1 is much larger in the logistic model. We attribute this divergence to the large effect of Inuit identity on language usage, as logistic models are better able to capture large effects than linear models when the dependent variable is binary.

Table 6.2.1: Child's Use of Indigenous Language At Home, 2017 — Part I

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4	Model 5
	(Intercept)	-4.769***	-3.082***	-3.260***	-3.039***	-2.454***
		(0.127)	(0.654)	(0.698)	(0.591)	(0.607)
Child Socio-Demographic and Indigenous Characteristics	Age	-0.017***	-0.005	0.001	0.003	-0.011
		(0.004)	(0.005)	(0.004)	(0.004)	(0.007)
	Male	-0.117**	-0.123***	-0.126***	-0.131***	-0.128***
		(0.037)	(0.036)	(0.036)	(0.036)	(0.036)
	Inuit	3.136***	2.776***	2.959***	2.838***	2.457***
		(0.270)	(0.294)	(0.381)	(0.382)	(0.305)
	Métis or Other Indigenous	-0.899***	-0.776***	-0.678***	-0.709***	-0.698***
		(0.190)	(0.194)	(0.191)	(0.192)	(0.187)
	Indigenous Citizenship	1.150***	1.116***	0.817***	0.779***	0.748***
		(0.132)	(0.140)	(0.157)	(0.166)	(0.170)
	Registration Status	0.649***	0.583***	0.458**	0.385*	0.342*
		(0.132)	(0.139)	(0.154)	(0.162)	(0.165)
Dwelling and Household Characteristics	Rented (Non-subsidized)		-0.355***	-0.261**	-0.203*	-0.178
			(0.093)	(0.090)	(0.093)	(0.095)
	Owned		-0.711***	-0.356*	-0.270	-0.232
			(0.139)	(0.143)	(0.142)	(0.146)
	Apartment		-0.222	-0.204	-0.136	0.073
			(0.273)	(0.267)	(0.257)	(0.281)
	Semi-Detached		-0.193	-0.183	-0.153	-0.023
			(0.260)	(0.257)	(0.248)	(0.271)
	Single-Detached		-0.154	-0.133	-0.068	-0.047
			(0.241)	(0.237)	(0.230)	(0.246)
	Adequate Housing		-0.381***	-0.339***	-0.295***	-0.231**
			(0.083)	(0.083)	(0.083)	(0.080)
	Suitable Housing		-0.323**	-0.245*	-0.155	-0.061
			(0.103)	(0.097)	(0.094)	(0.092)
	Affordable Housing		-0.072	-0.086	-0.096	-0.078
			(0.088)	(0.091)	(0.090)	(0.094)
	Total After-Tax Income		-0.040	-0.035	-0.057	-0.081*
			(0.053)	(0.061)	(0.049)	(0.038)
	Household Size		-0.003	0.021	0.011	0.009
			(0.052)	(0.056)	(0.053)	(0.054)
	Children		-0.002	-0.035	-0.033	-0.030
			(0.055)	(0.058)	(0.058)	(0.060)
	Youths		-0.088	-0.072	-0.078	-0.035
			(0.055)	(0.059)	(0.061)	(0.062)
	Household Maintainers		-0.048	-0.039	-0.019	0.011
			(0.054)	(0.052)	(0.054)	(0.054)
	Multigenerational Household		0.071	0.096	0.056	0.072
			(0.127)	(0.134)	(0.128)	(0.131)

Table 6.2.1: Child's Use of Indigenous Language At Home, 2017 — Part II

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4	Model 5
Primary Household Maintainer Socio-Demographic and Indigenous Characteristics	Age			-0.001	-0.010**	-0.011**
				(0.004)	(0.004)	(0.004)
	Male			-0.081	-0.037	-0.007
				(0.070)	(0.077)	(0.076)
	(Legally) Married			-0.165	-0.247*	-0.276**
				(0.105)	(0.101)	(0.101)
	Common-Law			0.097	0.019	-0.050
				(0.083)	(0.083)	(0.083)
	Separated			-0.099	-0.144	-0.142
				(0.147)	(0.141)	(0.144)
	Divorced or Widowed			-0.527***	-0.571***	-0.559***
				(0.136)	(0.133)	(0.137)
	Inuk (Inuit)			-0.105	-0.821*	-1.164**
				(0.330)	(0.396)	(0.393)
	Métis and Other Indigenous			0.014	0.124	0.096
				(0.187)	(0.202)	(0.202)
	Non-Indigenous			-0.888***	-0.698**	-0.700**
				(0.212)	(0.223)	(0.224)
	Indigenous Citizenship			0.327	0.272	0.193
				(0.316)	(0.346)	(0.359)
	Registration Status			0.252	0.206	0.213
				(0.285)	(0.308)	(0.319)
	Indigenous Mother Tongue				1.266***	1.266***
					(0.182)	(0.182)
	Deviance	78,373.26	76,924.10	75,227.51	72,724.20	70,473.86
	McFadden (Pseudo) R^2	0.148	0.162	0.182	0.210	0.234
	N	407,670	407,670	407,670	407,670	407,670

Note: The sample is restricted to Canadian-born, Indigenous children aged 1 to 18 years that resided outside of a reserve with a primary household maintainer aged 19 years or older. Model 1 includes controls for the child's socio-demographic and Indigenous characteristics. Model 2 adds controls for dwelling and household characteristics. Model 3 adds controls for the primary household maintainer's socio-demographic and Indigenous characteristics. Model 4 adds controls for the primary household maintainer's human capital and labour market characteristics. Model 5 adds controls for geographic characteristics. Survey weights are used for the analysis. Cluster robust standard errors at the census subdivision level are in parentheses.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

Source: *2016 Census of Population* (Statistics Canada 2017b)

7.0 Future Research

The results from this report aid CAP in terms of its long-standing role as an advocate for the provision of safe, affordable, and accessible housing for Indigenous people living off-reserve. The report accomplishes this in several ways.

First, the trend analysis provides important benchmarks upon which to gauge the success or failure of future policy. Second, the results of the analysis represent the first comprehensive study of the impact of housing conditions and characteristics on outcomes in the area of health, education, labour, and language, which directly responds to CAP's September 2018 resolution to collect and analyze data on "off-reserve housing." Third, the results of this report imply several new research questions, thereby establishing a broad research agenda to guide CAP's ongoing advocacy.

In the course of addressing several questions of interest, this study also poses several new questions that could be considered in future research. Some of the research questions presented by the results here involve the study of the impact of dwelling and household characteristics on each of the outcomes of interest (i.e., health, education, labour market, and language outcomes). Other questions involve the simultaneous effects of dwelling and household characteristics and the legacy of residential schools. One of the major constraints to this future work involves a lack of datasets that cover Indigenous topics with sufficient detail to address these research questions.

For instance, the results presented here intriguingly indicate a decreased odds of good mental health from suitable housing. Likewise, the results presented here indicate a decreased odds of a sense of belonging to one's own Indigenous group from home ownership and suitable housing.

Comparative analysis of the influence of housing characteristics and conditions on health outcomes is limited by the fact that no datasets currently exist that include sufficient data on health and housing for both Indigenous and non-Indigenous peoples. Neither the Census nor the CCHS provide an alternative. The current analysis of the influence of housing characteristics and conditions on health outcomes for Indigenous peoples alone is also constrained by the fact that the APS does not include data on younger or non-Indigenous household members.

The results for labour market outcomes also pose some questions that should be considered by future research. For instance, Indigenous workers have an unexplained lower likelihood of job satisfaction while residing in multigenerational households.

In terms of language use, the results presented here suggest negative tenure, adequate housing, and suitable housing effects on Indigenous languages being regularly used at home for children. Future research should consider whether these effects are associated with other demographic effects (e.g., the population density of Indigenous people within a neighbourhood). Future research should also consider the influence of residential school survivorship by older generations in multigenerational households on Indigenous language use by children.

The results presented here do not address the longer-run impacts of housing on school attendance and completion for older Indigenous youth (i.e., those aged 19 to 24 years). In fact, the datasets used in this

study are not rich enough to study the long run impacts of dwelling and household characteristics on all of the outcomes of interest. At a minimum, this type of analysis would require time series data. Time series data would allow the analysis to account for fixed or time-invariant effects (e.g., certain regional and geographic factors). Longitudinal datasets would be preferred, but pooled cross-sectional data should also be considered.

Enhancements to the APS survey instrument are additional approaches to consider in order to fill in the gaps of existing datasets. More specifically, the APS could be adjusted to collect on younger and non-Indigenous household members. This shift would the number of children and youths in the household to be integrated within the analysis.

8.0 Recommendations/Next Steps

The socioeconomic marginalization and disparities that exist between Off-reserve Indigenous peoples and the non-Indigenous population is underpinned by the intergenerational impact of modern and historical colonialism. CAP has consistently noted the resulting systematic and institutional racism and discrimination faced by its constituents residing in urban and rural regions, including conscious exclusion, erasure, and neglect on the part of Canadian policy-makers.

In turn, Off-reserve Indigenous households in Canada consistently experience worse housing conditions than their non-Indigenous counterparts. The results from this report aid CAP in terms of its long-standing role as an advocate for the provision of safe, affordable, and accessible housing for Indigenous people living off-reserve. The report accomplishes this in several ways. First, the descriptive trend analysis over time provides important socioeconomic benchmarks and gap analysis related to housing conditions, for Indigenous peoples separate from non-Indigenous Canadians, upon which to gauge the success or failure of future policy.

Second, the results of the analyses represent the first comprehensive study of the impact of housing conditions and characteristics on outcomes in the area of health, education, labour, and language, which directly responds to CAP's September 2018 resolution to collect and analyze data on "off-reserve housing" and as per CAP's Political Accord with Canada, signed in December 2018. Third, the results of this report imply several new future research questions as discussed in more details in the preceding section and thereby establishing a broad research agenda to guide CAP's ongoing advocacy in the housing priority area. The report's results also inform the following data/methodology related, program supports, and policy/strategy recommendations and implications for CAP, moving forward:

- CAP needs to work closely with Statistics Canada to enhance APS survey instrument to fill in the gaps of existing datasets. More specifically, the APS could be adjusted to collect on younger and non-Indigenous household member as well as capturing more detailed effects of the legacy of residential schools that would collectively result in a more integrated comparative results/analyses. Furthermore, CAP needs to advocate for APS record linkages. Statistics Canada would link individuals across different APS cycles. This approach would provide longitudinal data on several individuals that would support the analysis on long run impacts of housing characteristics.
- Current limitations of APS, CCHS and Census datasets necessitates for CAP to actively seek research funding to collect primary, non-cross-sectional panel and longitudinal, data that would better capture the specific and holistic experiences and effects of household characteristics for indigenous peoples residing off-reserve in urban and rural regions. Furthermore, and in order to gain a deeper and more meaningful understanding and interpretation of some of the results anomalies illustrated in the report, CAP must seek resources to adopt mixed methodologies approach deploying both quantitative, and qualitative if needed, methodology, in combination with strength-based Indigenous research methods of collecting information such as engaging with communities, and the use of methodologies like observation, sharing circles, oral histories and traditional storytelling that are connected to Indigenous values and ethics and that may not be reduced to statistics.
- CAP needs to advocate for increased funding to its Indigenous Skills and Employment Training (ISET) program in order to achieve more favorable labour force participation outcomes for its off-reserve status constituents.

- CAP must advocate for policies and programs that address the growing education gap between Indigenous and non-Indigenous children and youth. Schools must be sites of safety, growth, and identity building for all. Educational systems must be reformed so as to mitigate the damage of colonial policies like residential schools and chronic underfunding.
- CAP needs to actively seek resources for culturally based support services along with housing to ensure that language attainment and retention and social determinants of health, such as sense of belonging to indigenous group/community, are not impacted by homeownership.
- Advocacy for funding for Language revitalization programs have been traditionally been framed around redress and loss of culture. CAP need to advocate for a more effective approach of placing Indigenous language loss in the context of overall health and well-being.[22]
- CAP need to seek financial investments to support individual Indigenous homeownership in market regions that has the potential to equally support favorable socio-economic and health outcomes at the larger indigenous community level.
- CAP must demand that Indigenous community services and programs should be included in Governments' permanent funding models in order to ensure that all Indigenous peoples do not face systemic barriers and accomplish the full spectrum of wellbeing. Current funding mechanisms are episodic, or project-based.
- CAP must seek a holistic approach that addresses the entire continuum of housing needs in order to respond to the diverse needs of Indigenous people living in urban, rural regions.
- CAP must continue to advocate for results-based, "For Indigenous, By Indigenous", focused off-reserve/urban Indigenous Housing Strategy with CAP included as the National Indigenous Organization representing off-reserve status and non-status Indians, Métis, and Southern Inuit Aboriginal Peoples' unique perspective.[21]

Bibliography

"2018 Annual General Assembly Resolutions." 2018. Congress of Aboriginal Peoples. http://www.abo-peoples.org/wp-content/uploads/2018/11/2018-AGA-Resolutions-Final.pdf.

Baker, Emma, Andrew Beer, Laurence Lester, David Pevalin, Christine Whitehead, and Rebecca Bentley. 2017. "Is Housing a Health Insult?" *Environmental Research and Public Health*, Housing and Health, 14 (6). https://www.mdpi.com/1660-4601/14/6/567/htm#cite.

---

[21] Vink Consulting (2020) Off-Reserve Indigenous Housing: Issues, Programs, and Policy Priorities.

[22] Bourgeois, L.F., de la Sablonniere, R., & Taylor, D.M. (2018). Revitalizing Indigenous languages: A call for community action to address systemic discrimination

Baker, Emma, Rebecca Bentley, and Kate Mason. 2013. "The Mental Health Effects of Housing Tenure: Causal or Compositional?" *Urban Studies* 50 (2): 426–42. https://doi.org/10.1177/0042098012446992.

Blau, David M., Nancy L. Haskell, and Donald R. Haurin. 2019. "Are Housing Characteristics Experienced by Children Associated with Their Outcomes as Young Adults?" *Journal of Housing Economics* 46 (December): 101631. https://doi.org/10.1016/j.jhe.2019.04.003.

"Canada and the Congress of Aboriginal Peoples Political Accord." 2018. Congress of Aboriginal Peoples. http://www.abo-peoples.org/wp-content/uploads/2019/02/Political-Accord-ENG.pdf.

Bourgeois, L.F., de la Sablonniere, R., & Taylor, D.M. (2018). Revitalizing Indigenous languages: A call for community action to address systemic discrimination. In P.P Trifonas & T. Aravossitas (Eds.), Handbook of research and practice in heritage language education (pp. 771-785). Springer International. DOI:10.1007/978-3-319-44694-3_45

Cantoni, Gina. 2007. "Stabilizing Indigenous Languages." Flagstaff, AZ: Northern Arizona University. https://www.afn.ca/uploads/files/education2/stabilizing_indigenous_languages,center_for_excellence_in_education,_2007.pdf.

Findlay, Leanne C., and Dafna E. Kohen. 2012. "Neighborhood Factors and Language Outcomes of First Nations Preschoolers Living Off Reserve: Findings from the Aboriginal Children's Survey." *International Indigenous Policy Journal* 3 (2). https://doi.org/10.18584/iipj.2012.3.2.6.

Green, Richard K., and Michelle J. White. 1997. "Measuring the Benefits of Homeowning: Effects on Children." *Journal of Urban Economics* 41 (3): 441–61. https://doi.org/10.1006/juec.1996.2010.

Guèvremont, Anne, and Dafna E. Kohen. 2012. "Knowledge of an Aboriginal Language and School Outcomes for Children and Adults." *International Journal of Bilingual Education and Bilingualism* 15 (1): 1–27.

Hamdullahpur, Kevin, Kahá:wi J. Jacobs, and Kathryn J. Gill. 2017. "A Comparison of Socioeconomic Status and Mental Health among Inner-City Aboriginal and Non-Aboriginal Women." *International Journal of Circumpolar Health* 76 (1): 1340693. https://doi.org/10.1080/22423982.2017.1340693.

Ige, Janet, Paul Pilkington, Judy Orme, Ben Williams, Emily Prestwood, D Black, Laurence Carmichael, and Gabriel Scally. 2019. "The Relationship between Buildings and Health: A Systematic Review." *Journal of Public Health* 41 (2): e121–32. https://doi.org/10.1093/pubmed/fdy138.

Munch, Jakob Roland, Michael Rosholm, and Michael Svarer. 2006. "Are Homeowners Really More Unemployed?" *The Economic Journal* 116 (514): 991–1013. https://doi.org/10.1111/j.1468-0297.2006.01120.x.

Pevalin, David, Aaron Reeves, Emma Baker, and Rebecca Bentley. 2017. "The Impact of Persistent Poor Housing Conditions on Mental Health: A Longitudinal Population-Based Study." *Preventive Medicine* 105 (December): 304–10. https://doi.org/10.1016/j.ypmed.2017.09.020.

Statistics Canada. 2007. "2006 Census of Population."
———. 2009. "2007/2008 Canadian Community Health Survey."
———. 2012. "2011 National Household Survey."
———. 2013a. "2011/2012 Canadian Community Health Survey."
———. 2013b. "2012 Aboriginal Peoples Survey."
———. 2017a. "2015/2016 Canadian Community Health Survey."
———. 2017b. "2016 Census of Population."
———. 2018. "2017 Aboriginal Peoples Survey."

Steele, Margaret, and Janet Kreda. 2017. "Outcomes of Stable, Affordable Housing – A
118

Synthesis of Recent Research." Ottawa, ON: Canada Mortgage and Housing Corporation. ftp://ftp.cmhc-schl.gc.ca/chic-ccdh/Research_ Reports-Rapports_de_recherche/2018/RR_Outcomes_of_Stable_ Affordable_Housing_w.pdf.

Stephens, Benjamin J. 2010. "The Determinants of Labour Force Status among Indigenous Australians." *Australian Journal of Labour Economics* 13 (3): 287–312.

Turner, Annie, and Amanda Thompson. 2015. "School Mobility and Educational Outcomes of Off-Reserve First Nations Students." Statistics Canada. https://www150.statcan.gc.ca/n1/pub/89-653-x/89-653-x2015006-eng.htm.

Vink, Cassandra, Consulting. "Off-Reserve Indigenous Housing Paper," CAP publication, March 2020.

Appendix 1: Definitions and Terminology

Sense of belonging: Embodies the social attachment of individuals and reflects social engagement and participation within communities.

Band housing: Households who live in a dwelling on a reserve or settlement that has been provided to members of a First Nation or Indian band. Some band housing is located outside of a reserve

Household maintainers: Refers to whether or not a person residing in the household is responsible for paying the rent, or the mortgage, or the taxes, or the electricity or other services or utilities. Where a number of people may contribute to the payments, more than one person in the household may be identified as a household maintainer. If no person in the household is identified as making such payments, the reference person is identified by default.

Suitable housing: Whether a dwelling has enough bedrooms given the household's size and composition (CMHC 2019b). The term is from the National Occupancy Standard (NOS) developed by CMHC, which determines suitability based on the number of bedrooms and household composition.

Adequate housing: Adequate housing has to do with a dwelling's livability. If a dwelling does not require major repairs, it is considered adequate (CMHC 2019b). An adequate dwelling may be in need of regular maintenance or minor repairs, which may include cosmetic repairs or desired renovations.

Affordable housing: considers the income required by a household to cover shelter costs. The CMHC notes that "[a] conventional measure of housing affordability is the shelter-cost-to-income ratio [STIR], which most commonly sets the affordability threshold at 30% of before-tax household income" (CMHC 2019a).

Dwelling: A dwelling is defined as a set of living quarters. Two types of dwellings are identified in the census, collective dwellings and private dwellings. The former pertains to dwellings which are institutional, communal or commercial in nature. The latter, private dwellings, refers to a separate set of living quarters with a private entrance either from outside the building or from a common hall, lobby, vestibule or stairway inside the building. The entrance to the dwelling must be one that can be used without passing through the living quarters of some other person or group of persons.

Labour force participation rate: The labour force participation rate for a particular group (age, sex, marital status, geographic area, etc.) is the total labour force in that group, expressed as a percentage of the total.

Registration status: Whether or not a person is a Registered or Treaty Indian. Registered Indians are persons who are registered under the *Indian Act* of Canada. Treaty Indians are persons who belong to a First Nation or Indian band that signed a treaty with the Crown. Registered or Treaty Indians are sometimes also called Status Indians.

Appendix 2: Outcome Variables

School Outcomes

School Attendance is defined as an indicator variable that takes on a value of 1 if the individual attended a school of any type during the survey reference period, and is otherwise 0.[22][23]

School Completion is defined as an indicator variable that takes on a value of 1 if the individual completed at least secondary school by the survey reference period, and is otherwise 0.

Health Outcomes

General Health is defined as an indicator variable that takes on a value of 1 if the individual reports good, very good, or excellent perceptions of general health, and is otherwise 0.[24]

Mental Health is defined as an indicator variable that takes on a value of 1 if the individual reports good, very good, or excellent perceptions of general health, and is otherwise 0.[25]

Food Security is defined as an indicator variable that takes on a value of 1 if the individual reports being food secure, and is otherwise 0.[26]

Sense of Belonging is defined as an indicator variable that takes on a value of 1 if the individual reports having a sense of belonging to their own Indigenous group, and is otherwise 0.[27]

Labour Market Outcomes

Labour Force Status is defined as a set of indicator variables as follows:

- *Unemployed* takes on a value of 1 if the individual was unemployed during the survey reference period, and is otherwise 0.
- *Employed* takes on a value of 1 if the individual was unemployed during the survey reference period, and is otherwise 0.

---

[23] Although the focus is on youth, school attendance is not restricted to the case of attendance at a secondary school. For instance, a youth could have completed secondary school and transitioned to post-secondary education or the youth could have transitioned to an alternative form of education (e.g., trades training) without completing secondary school.

[24] The original APS perceived general health variable was collapsed from five levels to two. To have good general health includes the response categories of having "good", "very good", and "excellent health." To not have good general health covers all other response categories ("poor" and "fair").

[25] The original APS perceived mental health variable was collapsed from five levels to two. To have good mental health includes the response categories of having "good", "very good", and "excellent health." To not have good mental health covers all other response categories ("poor" and "fair").

[26] The original APS food security variable was collapsed from three levels to two. To be food secure includes only the "food secure" response category. To be food insecure covers all other response categories (moderate food insecurity and severe food insecurity).

[27] The original APS sense of belonging variable was collapsed from five levels to two. To belong to one's own Indigenous group includes the response categories of "agree" and "strongly agree." To not belong covers all other response categories (strongly disagree, disagree, neither agree nor disagree).

- The reference category (i.e., when *Unemployed* and *Employed* both take on a value of 0) involves individuals that did not participate in the labour force during the survey reference period.

Full-Time Work Status is defined as a set of indicator variables as follows:

- *Part-Time Weeks* takes on a value of 1 if the individual worked mostly part-time weeks during the survey reference period, and is otherwise 0.
- *Full-Time Weeks* takes on a value of 1 if the individual worked mostly full-time weeks during the survey reference period, and is otherwise 0.
- The reference category (i.e., when *Part-Time Weeks* and *Full-Time Weeks* both take on a value of 0) involves individuals that did not participate in the labour force during the survey reference period.

Job Satisfaction is defined as an indicator variable that takes on a value of 1 if the individual reports being satisfied with their job, and is otherwise 0.[28]

Language Outcomes

Regular Indigenous Language Usage at Home is defined as an indicator variable that takes on a value of 1 if the individual reports using an Indigenous language regularly at home, and is otherwise 0.

---

[28] The original APS job satisfaction variable was collapsed from five levels to two. To be satisfied includes being satisfied and very satisfied with a job. To be unsatisfied covers all other categories (very dissatisfied, dissatisfied, and neither satisfied nor dissatisfied).

Appendix 3: Background Characteristic Variables

Demographic Characteristics

Age is defined as an integer variable taking values for the individual's years since birth.

Sex is defined as an indicator variable taking on a value of 0 if the individual's sex is a female and 1 if the individual's sex is male.[29]

Marital Status is defined as a set of indicator variables as follows:

- *Legally Married* takes on a value of 1 if the individual is legally married, and is otherwise 0.
- *Common-Law* takes on a value of 1 if the individual is a member of a couple living common law, and is otherwise 0.
- *Separated* takes on a value of 1 if the individual is separated, and is otherwise 0.
- *Divorced or Widowed* takes on a value of 1 if the individual is either divorced or widowed, and is otherwise 0.
- The reference category (i.e., when *Legally Married*, *Common-Law*, *Separated*, and *Divorced or Widowed* all take on a value of 0) individuals that were never married.

Indigenous Characteristics

Indigenous Identity Group is defined as a set of indicator variables as follows:

- *Inuk (Inuit)* takes on a value of 1 if the individual is of Inuit identity (i.e., an Inuk), and is otherwise 0.
- *Métis or Other Indigenous* takes 1 if the individual is of Métis identity or holds multiple Indigenous identities (e.g., First Nations and Inuit or First Nations and Métis), and is otherwise 0.
- *Non-Indigenous* takes on a value of 1 if the individual is non-Indigenous identity, and is otherwise 0.
- The reference category (i.e., when *Inuk (Inuit)*, *Métis or Other Indigenous*, or *Non-Indigenous* all take on a value of 0) involves individuals of First Nations identity.

Indigenous Citizenship is defined in two ways.

- For analysis that relies on the Census, *Indigenous Citizenship* is defined as an indicator variable taking on a value of 1 if the individual is a member of a First Nation (or band), and is otherwise 0.
- For analysis that relies on the APS, *Indigenous Citizenship* is defined as an indicator variable taking on a value of 1 if the individual is a member of a First Nation (or band) or a holder of a Métis identity card or certificate, and is otherwise 0.

---

[29] Sex differs as a concept from gender. Neither the Census nor the APS contain a variable for gender.

Registration Status is defined as an indicator variable that takes on a value of 1 if the individual is registered under the Indian Act of Canada or a member of a First Nation or Indian band that signed a treaty with the Crown, and is otherwise 0.

Indigenous Mother Tongue is defined as an indicator variable that takes on a value of 1 if the individual has an Indigenous mother tongue, and is otherwise 0.[30]

Dwelling and Household Characteristics

Tenure is defined as a set of indicator variables defined a follows:

- *Renter (Non-Subsidized)* takes on a value of 1 if the individual is a member of a renter household residing in a dwelling that is not subsidized, and is otherwise 0.
- *Owner* takes on a value of 1 if the individual is a member of an owner household, and is otherwise 0.
- The reference category (i.e., when *Renter (Non-Subsidized)* and *Owner* both take on a value of 0) involves individuals that are members of a renter household residing in a subsidized dwelling or are members of a household residing in band housing.

Dwelling Type is defined as a set of indicator variables as follows:

- *Apartment* takes on a value of 1 if the individual resides in either an apartment or flat in a duplex, an apartment in a building that has fewer than five storeys, or an apartment in a building that has five or more storeys, and is otherwise 0.
- *Semi-Detached* takes on a value of 1 if the individual resides in a semi-detached house or a row house, and is otherwise 0.
- *Single-Detached* takes on a value of 1 if the individual resides in a single-detached house, and is otherwise 0.
- The reference category (i.e., when *Apartment*, *Semi-Detached*, and *Single-Detached* all take on a value of 0) individuals that reside in either a mobile home or other movable dwelling.

Adequate Housing is defined as an indicator variable that takes on a value of 1 if the individual resides in a dwelling that is not in need of major repairs, and is otherwise 0.

Affordable Housing is defined as an indicator variable that takes on a value of 1 if the individual resides in a household whose ratio of average monthly shelter costs to average monthly total household income is less than 30%, and is otherwise 0.

Suitable Housing is defined as an indicator variable that takes on a value of 1 if the individual resides in a dwelling that is suitable relative to the National Occupancy Standard (i.e., enough bedrooms for the size and composition of the household), and is otherwise 0.

Household Total After-Tax Income is defined as a continuous variable by taking on the log of the sum of household total after-tax income and the absolute value of the minimum household total after-tax income found within the sample.

---

[30] This characteristics is also categorized under Human Capital and Labour Market Characteristics.

Household Size is defined as an integer variable taking on values for the number of persons (of any age) within the household.

Number of Children (in Household) is defined as an integer variable taking on values for the number of persons aged 18 years or younger residing within the household.

Number of Youths (in Household) is defined as an integer variable taking on values for the number of persons aged 15 to 18 years residing within the household.

Number of Household Maintainers is defined as an integer variable taking on values between 1 and 5 for the number of persons aged 15 years or older residing in the household who have identified as a household maintainer (i.e., responsible for household payments).

Multigenerational Household Status is defined as an indicator variable that takes on a value of 1 if the individual resided in a household where there is at least one person living with a child and a grandchild, and is otherwise 0.

Human Capital and Labour Market Characteristics

Highest Level of Schooling is defined as a set of indicator variables as follows:

- *Secondary School* takes on a value of 1 if the individual's highest certificate, diploma, or degree is a secondary school diploma or equivalency certificate, and is otherwise 0.
- *Some Post-Secondary* takes on a value of 1 if the individual's highest certificate, diploma, or degree is an apprenticeship or trades certificate or diploma or a college, CEGEP, or non-university certificate or diploma, and is otherwise 0.
- *Below Undergraduate* takes on a value of 1 if the individual's highest certificate, diploma, or degree is a university certificate or diploma below the bachelor's levels, and is otherwise 0.
- *Undergraduate or Above* takes on a value of 1 if the individual's highest certificate, diploma, or degree is a bachelor's degree, a university certificate or diploma above the bachelor's level, a degree in medicine, dentistry, veterinary medicine, or optometry, a master's degree, or an earned doctorate, and is otherwise 0.
- The reference category (i.e., when *Secondary School*, *Some Post-Secondary*, *Below Undergraduate*, and *Undergraduate or Above* all take on a value of 0) involves individuals that have no certificate, diploma, or degree.

Labour Force Status is defined as a set of indicator variables as follows:

- Unemployed takes on a value of 1 if the individual was unemployed during the survey reference period, and is otherwise 0.
- *Employed* takes on a value of 1 if the individual was unemployed during the survey reference period, and is otherwise 0.
- The reference category (i.e., when *Unemployed* and *Employed* both take on a value of 0) involves individuals that did not participate in the labour force during the reference period.

Full-Time Status is defined as a set of indicator variables as follows:

- *Part-Time Weeks* takes on a value of 1 if the individual worked mostly part-time weeks during the survey reference period, and is otherwise 0.

- *Full-Time Weeks* takes on a value of 1 if the individual worked mostly full-time weeks during the survey reference period, and is otherwise 0.
- The reference category (i.e., when *Part-Time Weeks* and *Full-Time Weeks* both take on a value of 0) involves individuals that did not participate in the labour force during the survey reference period.

Job Satisfaction is defined as an indicator variable that takes on a value of 1 if the individual reports being satisfied with their job, and is otherwise 0.[31]

Industry of Employment is designed as a set of indicator variables as follows:

- *31-33 Manufacturing* takes on a value of 1 if the individual was employed in the manufacturing sector in the reference period, and is otherwise 0.
- *41-49 Trade and Transportation* takes on a value of 1 if the individual was employed in the wholesale trade, retail trade, or transportation and warehousing sectors in the reference period, and is otherwise 0.
- *51-56 Professional Services* takes on a value of 1 if the individual was employed in the information and cultural industries; finance and insurance; real estate and rental and leasing; professional, scientific and technical services; management of companies and enterprises; or administrative and support, waste management and remediation services sectors in the reference period, and is otherwise 0.
- *61-62 Educational, Health, and Social Services* takes on a value of 1 if the individual was employed in the educational services or health care and social services sectors in the reference period, and is otherwise 0.
- *71-72 Arts, Entertainment, Recreation, Accommodation, and Food Services* takes on a value of 1 if the individual was employed in the arts, entertainment, and recreation or accommodation and food services sectors in the reference period, and is otherwise 0.
- *81 Other Services (Except Public Administration)* takes on a value of 1 if the individual was employed in the other services (except public administration) sector in the reference period, and is otherwise 0.
- *91 Public Administration* takes on a value of 1 if the individual was employed in the public administration sector in the reference period, and is otherwise 0.
- The reference category (i.e., when *31-33 Manufacturing*, *41-49 Trade and Transportation*, *51-56 Professional Services*, *61-62 Educational, Health, and Social Services*, *71-72 Arts, Entertainment, Recreation, Accommodation, and Food Services*, *81 Other Services (Except Public Administration)*, and *91 Public Administration* all take on a value of 0) involves individuals that did not participating in the labour force during the reference period.

---

[31] The original APS job satisfaction variable was collapsed from five levels to two. To be satisfied includes being satisfied and very satisfied with a job. To be unsatisfied covers all other categories (very dissatisfied, dissatisfied, and neither satisfied nor dissatisfied).

Health Characteristics

General Health is defined as an indicator variable that takes on a value of 1 if the individual reports good, very good, or excellent perceptions of general health, and is otherwise 0.[32]

Mental Health is defined as an indicator variable that takes on a value of 1 if the individual reports good, very good, or excellent perceptions of general health, and is otherwise 0.[33]

Food Security is defined as an indicator variable that takes on a value of 1 if the individual reports being food secure, and is otherwise 0.[34]

Sense of Belonging is defined as an indicator variable that takes on a value of 1 if the individual reports having a sense of belonging to their own Indigenous group, and is otherwise 0.[35]

Geography

Region is defined as a set of indicator variables as follows:

- *AT* takes on a value of 1 if the individual resides in one of the Atlantic provinces (i.e., Nova Scotia, New Brunswick, Newfoundland and Labrador, and Prince Edward Island), and is otherwise 0.
- *BC* takes on a value of 1 if the individual resides in British Columbia, and is otherwise 0.
- *MB* takes on a value of 1 if the individual resides in Manitoba, and is otherwise 0.
- *ON* takes on a value of 1 if the individual resides in Ontario, and is otherwise 0.
- *PQ* takes on a value of 1 if the individual resides in Quebec, and is otherwise 0.
- *SK* takes on a value of 1 if the individual resides in Saskatchewan, and is otherwise 0.
- *YT / NT / NU* takes on a value of 1 if the individual resides in one of the territories (i.e., Northwest Territories, Nunavut, and Yukon), and is otherwise 0.
- The reference category (i.e., when *AT*, *BC*, *MB*, *ON*, *PQ*, *SK*, and *YT / NT / NU* all take on a value of 0) involves individuals that reside in Alberta.

---

[32] The original APS perceived general health variable was collapsed from five levels to two. To have good general health includes having good, very good, or excellent health. To not have good general health covers all other categories (poor and fair).

[33] The original APS perceived mental health variable was collapsed from five levels to two. To have good mental health includes having good, very good, or excellent health. To not have good mental health covers all other categories (poor and fair).

[34] The original APS food security variable was collapsed from three levels to two. To be food secure includes only the food secure level. To be food insecure covers all other categories (moderate food insecurity and severe food insecurity).

[35] The original APS sense of belonging variable was collapsed from five levels to two. To belong to one's own Indigenous group includes agree and strongly agree. To not belong covers all other categories (strongly disagree, disagree, neither agree nor disagree.

Geographic Setting is defined as a set of indicator variables as follows:

- *Semi-Rural* takes on a value of 1 if the individual resides in a small population centre located outside of a reserve, and is otherwise 0.
- *Suburban* takes on a value of 1 if the individual resides in a medium population centre located outside of a reserve, and is otherwise 0.
- *Urban* takes on a value of 1 if the individual resides in a large population centre located outside of a reserve, and is otherwise 0.
- The reference category (i.e., when *Semi-Rural*, *Suburban*, and *Urban* all take on a value of 0) involves individuals that reside in rural areas.

1-Year Mobility Status is defined as a set of indicator variables as follows:

- *1-Year Intraprovincial Migrant* takes on a value of 1 if the individual resided in a different community within the same province in the previous year, and is otherwise 0.
- *1-Year Moved Within Community* takes on a value of 1 if the individual resided in a different dwelling within the same community in the previous year, and is otherwise 0.
- *1-Year Non-Mover* takes on a value of 1 if the individual resided in the same dwelling in the previous year, and is otherwise 0.
- The reference category (i.e., when *1-Year Intraprovincial Migrant*, *1-Year Moved Within Community*, and *1-Year Non-Mover* all take on a value of 0) involves individuals that resided in other provinces or outside of the country in the previous year.

5-Year Mobility Status is defined as a set of indicator variables as follows:

- *5-Year Intraprovincial Migrant* takes on a value of 1 if the individual resided in a different community within the same province within one to five years prior, and is otherwise 0.
- *5-Year Moved Within Community* takes on a value of 1 if the individual resided in a different dwelling within the same community within one to five years prior, and is otherwise 0.
- *5-Year Non-Mover* takes on a value of 1 if the individual resided in the same dwelling within one to five years prior, and is otherwise 0.
- The reference category (i.e., when *5-Year Intraprovincial Migrant*, *5-Year Moved Within Community*, and *5-Year Non-Mover* all take on a value of 0) involves individuals that resided in other provinces or outside of the country within one to five years prior.

Appendix 4: Full Results

3.0 Health

3.2 General Health

Table 3.2.1: Individual's Perceived General Health, Indigenous People, 2017 — Part I

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4	Model 5
	(Intercept)	1.998***	-0.710*	-0.654	-1.258***	-1.075*
		(0.092)	(0.346)	(0.350)	(0.351)	(0.446)
Individual Socio-Demographic and Indigenous Characteristics	Age	-0.026***	-0.029***	-0.027***	-0.039***	-0.040***
		(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
	Male	0.133*	0.068	0.105	-0.125*	-0.128*
		(0.054)	(0.054)	(0.055)	(0.060)	(0.060)
	Inuk (Inuit)	0.157	0.326**	0.380***	0.284*	0.221
		(0.099)	(0.110)	(0.113)	(0.143)	(0.139)
	Métis or Other Indigenous	0.158*	0.032	0.046	0.026	0.003
		(0.071)	(0.069)	(0.070)	(0.075)	(0.076)
	Indigenous Citizenship	0.106	0.066	0.053	-0.041	-0.050
		(0.073)	(0.074)	(0.075)	(0.077)	(0.078)
	Registered	-0.036	0.051	0.092	0.069	0.081
		(0.090)	(0.090)	(0.090)	(0.092)	(0.093)
	Indigenous Mother Tongue	-0.044	0.309**	0.308**	0.352*	0.323*
		(0.093)	(0.106)	(0.111)	(0.157)	(0.164)
	Married	0.611***	0.211*	0.166	0.056	0.073
		(0.089)	(0.089)	(0.088)	(0.097)	(0.098)
	Common-Law	0.417***	0.246**	0.243**	0.133	0.137
		(0.089)	(0.086)	(0.084)	(0.096)	(0.098)
	Separated	0.012	0.053	0.026	0.227	0.269
		(0.141)	(0.143)	(0.146)	(0.177)	(0.176)
	Divorced or Widowed	0.074	0.059	0.029	0.067	0.085
		(0.104)	(0.106)	(0.108)	(0.112)	(0.111)

Table 3.2.1: Individual's Perceived General Health, Indigenous People, 2017 — Part II

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4	Model 5
Dwelling and Household Characteristics	Rented (Non-Subsidized)		0.274*	0.228*	0.109	0.114
			(0.107)	(0.108)	(0.120)	(0.119)
	Owned		0.794***	0.679***	0.384***	0.370**
			(0.100)	(0.102)	(0.113)	(0.114)
	Apartment		0.500**	0.395*	0.356*	0.337
			(0.169)	(0.170)	(0.171)	(0.177)
	Semi-Detached		0.398*	0.323	0.186	0.186
			(0.175)	(0.174)	(0.172)	(0.176)
	Single-Detached		0.628***	0.561***	0.439**	0.439**
			(0.163)	(0.162)	(0.159)	(0.159)
	Adequate Housing		0.571***	0.553***	0.471***	0.465***
			(0.090)	(0.090)	(0.102)	(0.103)
	Suitable Housing		0.183	0.165	0.254*	0.258*
			(0.110)	(0.109)	(0.118)	(0.119)
	Affordable Housing		0.390***	0.378***	0.234**	0.209*
			(0.071)	(0.071)	(0.081)	(0.082)
	Total After-Tax Income		0.105***	0.085***	0.057**	0.060**
			(0.023)	(0.022)	(0.022)	(0.021)
	Household Size		-0.054	-0.039	-0.033	-0.035
			(0.028)	(0.028)	(0.030)	(0.030)
	Household Maintainers		0.058	0.052	0.090	0.095
			(0.049)	(0.048)	(0.051)	(0.051)
	Multigenerational Household		-0.447***	-0.412**	-0.459**	-0.457**
			(0.132)	(0.132)	(0.147)	(0.145)
Individual Human Capital Characteristics	Secondary School			0.287**	0.243*	0.262*
				(0.097)	(0.103)	(0.102)
	Some Post-Secondary			0.203*	0.200*	0.215*
				(0.083)	(0.101)	(0.101)
	Below Undergraduate			0.323***	0.240**	0.254**
				(0.080)	(0.092)	(0.092)
	Undergraduate or Above			1.121***	0.965***	0.978***
				(0.112)	(0.115)	(0.113)
	Employed			-0.088	-0.401***	-0.396***
				(0.103)	(0.120)	(0.119)
Health Characteristics	Sense of Belonging				0.096	0.082
					(0.075)	(0.076)
	Food Secure				0.860***	0.861***
					(0.070)	(0.071)
	Good Mental Health				2.378***	2.380***
					(0.081)	(0.082)

130

Table 3.2.1: Individual's Perceived General Health, Indigenous People, 2017 — Part III

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4	Model 5
Geographic Characteristics	Atlantic Provinces					-0.085
						(0.137)
	British Columbia					-0.169
						(0.126)
	Manitoba					0.049
						(0.103)
	Ontario					-0.143
						(0.111)
	Quebec					0.143
						(0.123)
	Saskatchewan					-0.144
						(0.124)
	Territories					0.042
						(0.133)
	Semi-Rural					0.017
						(0.088)
	Suburban					0.096
						(0.110)
	Urban					0.041
						(0.089)
Mobility (1-Year)	Intraprovincial Migrant					-0.035
						(0.330)
	Moved Within Community					-0.034
						(0.283)
	Non-Mover					-0.082
						(0.281)
Mobility (5-Year)	Intraprovincial Migrant					-0.048
						(0.172)
	Moved Within Community					-0.154
						(0.147)
	Non-Mover					-0.012
						(0.156)
	Deviance	870,235.83	833,197.94	824,284.47	679,899.78	678,519.12
	McFadden (Pseudo) R^2	0.031	0.073	0.082	0.243	0.245
	N	869,730	869,730	869,730	869,730	869,730

Note: The sample is restricted to Canadian-born Indigenous individuals aged 15 years or older residing outside of a reserve. Model 1 includes controls for individual socio-demographic and Indigenous characteristics. Model 2 adds controls for housing and household characteristics. Model 3 adds controls for individual human capital and labour market characteristics. Model 4 adds controls for other health characteristics. Model 5 adds controls for geographic characteristics. Survey weights are used for the analysis. Cluster robust standard errors at the census subdivision level are in parentheses.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

Source: *2017 Aboriginal Peoples Survey* (Statistics Canada 2018)

131

3.3 Mental Health

Table 3.3.1: Individual's Perceived Mental Health, Indigenous People, 2017 — Part I

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4	Model 5
	(Intercept)	0.713***	-0.759*	-0.972**	-1.810***	-2.324***
		(0.101)	(0.315)	(0.323)	(0.384)	(0.436)
Individual Socio-Demographic and Indigenous Characteristics	Age	0.009***	0.009***	0.010***	0.026***	0.025***
		(0.002)	(0.002)	(0.002)	(0.003)	(0.003)
	Male	0.466***	0.430***	0.465***	0.440***	0.432***
		(0.055)	(0.056)	(0.056)	(0.061)	(0.061)
	Inuk (Inuit)	0.416**	0.403**	0.423**	0.238	0.051
		(0.142)	(0.154)	(0.155)	(0.181)	(0.170)
	Métis or Other Indigenous	0.116	0.032	0.031	-0.000	-0.009
		(0.071)	(0.070)	(0.070)	(0.077)	(0.079)
	Indigenous Citizenship	0.219**	0.179*	0.168*	0.078	0.077
		(0.075)	(0.077)	(0.078)	(0.082)	(0.081)
	Registered	-0.013	0.045	0.071	-0.003	0.007
		(0.093)	(0.095)	(0.095)	(0.101)	(0.098)
	Indigenous Mother Tongue	0.136	0.298	0.308	0.174	0.140
		(0.172)	(0.178)	(0.181)	(0.214)	(0.218)
	(Legally) Married	0.498***	0.228**	0.177*	0.080	0.089
		(0.085)	(0.088)	(0.089)	(0.099)	(0.100)
	Common-Law	0.391***	0.322***	0.307***	0.243*	0.222
		(0.090)	(0.092)	(0.093)	(0.112)	(0.115)
	Separated	-0.288	-0.277	-0.312*	-0.372	-0.336
		(0.157)	(0.156)	(0.158)	(0.194)	(0.192)
	Divorced or Widowed	-0.048	-0.041	-0.070	-0.042	-0.014
		(0.113)	(0.113)	(0.114)	(0.122)	(0.124)

Table 3.3.1: Individual's Perceived Mental Health, Indigenous People, 2017 — Part II

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4	Model 5
Dwelling and Household Characteristics	Rented (Non-Subsidized)		0.212*	0.181	0.052	0.076
			(0.103)	(0.103)	(0.111)	(0.114)
	Owned		0.564***	0.501***	0.120	0.156
			(0.123)	(0.121)	(0.136)	(0.143)
	Apartment		0.221	0.156	-0.097	-0.056
			(0.198)	(0.196)	(0.206)	(0.217)
	Semi-Detached		0.299	0.257	0.012	0.080
			(0.201)	(0.199)	(0.204)	(0.216)
	Single-Detached		0.428*	0.386*	0.044	0.066
			(0.183)	(0.181)	(0.186)	(0.187)
	Adequate Housing		0.331***	0.307***	0.002	0.000
			(0.087)	(0.087)	(0.106)	(0.107)
	Suitable Housing		-0.157	-0.175	-0.285*	-0.280*
			(0.097)	(0.097)	(0.111)	(0.116)
	Affordable Housing		0.291***	0.275***	0.071	0.060
			(0.074)	(0.075)	(0.095)	(0.096)
	Total After-Tax Income		0.057**	0.045*	-0.021	-0.016
			(0.019)	(0.020)	(0.031)	(0.030)
	Household Size		-0.013	-0.002	0.038	0.039
			(0.029)	(0.029)	(0.033)	(0.032)
	Household Maintainers		-0.043	-0.046	-0.088	-0.080
			(0.046)	(0.045)	(0.052)	(0.052)
	Multigenerational Household		-0.057	-0.040	0.192	0.193
			(0.131)	(0.133)	(0.152)	(0.153)
Individual Human Capital Characteristics	Secondary School			0.149	-0.001	-0.002
				(0.121)	(0.127)	(0.126)
	Some Post-Secondary			0.052	-0.095	-0.094
				(0.098)	(0.116)	(0.118)
	Below Undergraduate			0.207*	0.001	-0.011
				(0.102)	(0.112)	(0.115)
	Undergraduate or Above			0.523***	-0.034	-0.044
				(0.144)	(0.157)	(0.156)
	Employed			0.307**	0.369**	0.364**
				(0.105)	(0.118)	(0.119)
Health Characteristics	Sense of Belonging				0.419***	0.390***
					(0.081)	(0.079)
	Food Secure				0.659***	0.668***
					(0.071)	(0.072)
	Good General Health				2.384***	2.384***
					(0.082)	(0.083)

Table 3.3.1: Individual's Perceived Mental Health, Indigenous People, 2017 — Part III

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4	Model 5
Geographic Characteristics	Atlantic Provinces					0.234
						(0.153)
	British Columbia					0.186
						(0.139)
	Manitoba					0.027
						(0.118)
	Ontario					-0.002
						(0.129)
	Quebec					0.455*
						(0.192)
	Saskatchewan					0.419**
						(0.144)
	Territories					0.380*
						(0.164)
	Semi-Rural					-0.007
						(0.104)
	Suburban					-0.164
						(0.127)
	Urban					-0.063
						(0.102)
Mobility (1-Year)	Intraprovincial Migrant					0.253
						(0.273)
	Moved Within Community					0.474*
						(0.237)
	Non-Mover					0.465*
						(0.230)
Mobility (5-Year)	Intraprovincial Migrant					-0.066
						(0.169)
	Moved Within Community					-0.049
						(0.160)
	Non-Mover					-0.140
						(0.154)
	Deviance	740,384.28	726,701.29	723,723.90	584,992.20	581,874.78
	McFadden (Pseudo) R^2	0.026	0.044	0.048	0.231	0.235
	N	869,730	869,730	869,730	869,730	869,730

Note: The sample is restricted to Canadian-born Indigenous individuals aged 15 years or older residing outside of a reserve. Model 1 includes controls for individual socio-demographic and Indigenous characteristics. Model 2 adds controls for housing and household characteristics. Model 3 adds controls for individual human capital and labour market characteristics. Model 4 adds controls for other health characteristics. Model 5 adds controls for geographic characteristics. Survey weights are used for the analysis. Cluster robust standard errors at the census subdivision level are in parentheses.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

Source: *2017 Aboriginal Peoples Survey* (Statistics Canada 2018)

3.4 Food Security

Table 3.4.1: Individual's Food Security, Indigenous People, 2017 — Part I

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4	Model 5
	(Intercept)	-0.185[*]	-5.210[***]	-5.548[***]	-6.181[***]	-5.856[***]
		(0.075)	(0.739)	(0.584)	(0.510)	(0.519)
Individual Socio-Demographic and Indigenous Characteristics	Age	0.006[***]	0.004	0.005[*]	0.010[***]	0.009[***]
		(0.002)	(0.002)	(0.002)	(0.002)	(0.003)
	Male	0.258[***]	0.189[***]	0.273[***]	0.242[***]	0.234[***]
		(0.046)	(0.047)	(0.048)	(0.051)	(0.051)
	Inuk (Inuit)	-0.496[***]	-0.364[***]	-0.298[**]	-0.318[**]	-0.197
		(0.113)	(0.108)	(0.107)	(0.110)	(0.123)
	Métis or Other Indigenous	0.286[***]	0.100	0.106	0.090	0.092
		(0.058)	(0.060)	(0.060)	(0.062)	(0.063)
	Indigenous Citizenship	0.161[*]	0.100	0.079	0.112	0.128
		(0.066)	(0.070)	(0.072)	(0.072)	(0.072)
	Registered	-0.170[*]	-0.044	0.013	0.012	0.019
		(0.077)	(0.075)	(0.075)	(0.077)	(0.077)
	Indigenous Mother Tongue	-1.104[***]	-0.700[***]	-0.702[***]	-0.746[***]	-0.737[***]
		(0.095)	(0.107)	(0.113)	(0.113)	(0.112)
	(Legally) Married	0.879[***]	0.411[***]	0.315[***]	0.270[**]	0.301[***]
		(0.075)	(0.082)	(0.082)	(0.087)	(0.087)
	Common-Law	0.283[***]	0.093	0.065	-0.003	0.027
		(0.076)	(0.081)	(0.081)	(0.087)	(0.088)
	Separated	-0.282[*]	-0.203	-0.288[*]	-0.280[*]	-0.260[*]
		(0.124)	(0.123)	(0.124)	(0.132)	(0.130)
	Divorced or Widowed	-0.116	-0.100	-0.169	-0.190	-0.187
		(0.104)	(0.110)	(0.110)	(0.117)	(0.117)

Table 3.4.1: Individual's Food Security, Indigenous People, 2017 — Part II

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4	Model 5
Dwelling and Household Characteristics	Rented (Non-Subsidized)		0.510***	0.461***	0.406***	0.416***
			(0.091)	(0.090)	(0.093)	(0.097)
	Owned		1.348***	1.242***	1.137***	1.114***
			(0.094)	(0.088)	(0.091)	(0.095)
	Apartment		0.623***	0.472**	0.419*	0.302
			(0.154)	(0.155)	(0.170)	(0.173)
	Semi-Detached		0.677***	0.582***	0.546**	0.456**
			(0.159)	(0.159)	(0.174)	(0.176)
	Single-Detached		0.639***	0.552***	0.474**	0.426**
			(0.142)	(0.142)	(0.155)	(0.156)
	Adequate Housing		0.499***	0.469***	0.381***	0.387***
			(0.081)	(0.083)	(0.082)	(0.083)
	Suitable Housing		0.240*	0.207*	0.193*	0.193*
			(0.094)	(0.094)	(0.093)	(0.095)
	Affordable Housing		0.510***	0.519***	0.472***	0.476***
			(0.092)	(0.083)	(0.079)	(0.078)
	Total After-Tax Income		0.286***	0.229***	0.207***	0.202***
			(0.076)	(0.057)	(0.047)	(0.045)
	Household Size		-0.124***	-0.099***	-0.093***	-0.098***
			(0.028)	(0.028)	(0.028)	(0.028)
	Household Maintainers		0.047	0.037	0.038	0.027
			(0.038)	(0.039)	(0.039)	(0.038)
	Multigenerational Household		-0.269*	-0.233	-0.175	-0.166
			(0.123)	(0.127)	(0.134)	(0.134)
Individual Human Capital Characteristics	Secondary School			0.292***	0.241***	0.243***
				(0.076)	(0.083)	(0.085)
	Some Post-Secondary			0.345***	0.309**	0.297**
				(0.088)	(0.095)	(0.095)
	Below Undergraduate			0.458***	0.385***	0.376***
				(0.074)	(0.077)	(0.077)
	Undergraduate or Above			1.215***	1.051***	1.027***
				(0.104)	(0.108)	(0.107)
	Employed			0.703***	0.700***	0.704***
				(0.097)	(0.103)	(0.103)
Health Characteristics	Sense of Belonging				-0.289***	-0.288***
					(0.058)	(0.058)
	Good General Health				0.839***	0.837***
					(0.070)	(0.070)
	Good Mental Health				0.651***	0.657***
					(0.070)	(0.071)

Table 3.4.1: Individual's Food Security, Indigenous People, 2017 — Part III

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4	Model 5
Geographic Characteristics	Atlantic Provinces					-0.267**
						(0.102)
	British Columbia					0.023
						(0.101)
	Manitoba					0.007
						(0.098)
	Ontario					0.133
						(0.099)
	Quebec					0.083
						(0.102)
	Saskatchewan					-0.024
						(0.086)
	Territories					-0.117
						(0.172)
	Semi-Rural					-0.150*
						(0.074)
	Suburban					-0.070
						(0.092)
	Urban					0.087
						(0.078)
Mobility (1-Year)	Intraprovincial Migrant					-0.193
						(0.212)
	Moved Within Community					-0.251
						(0.188)
	Non-Mover					-0.124
						(0.179)
Mobility (5-Year)	Intraprovincial Migrant					-0.123
						(0.148)
	Moved Within Community					-0.015
						(0.139)
	Non-Mover					-0.006
						(0.142)
	Deviance	1,063,276.03	970,452.25	950,465.57	910,394.09	906,661.37
	McFadden (Pseudo) R^2	0.065	0.147	0.164	0.200	0.203
	N	869,730	869,730	869,730	869,730	869,730

Note: The sample is restricted to Canadian-born Indigenous individuals aged 15 years or older residing outside of a reserve. Model 1 includes controls for individual socio-demographic and Indigenous characteristics. Model 2 adds controls for housing and household characteristics. Model 3 adds controls for individual human capital and labour market characteristics. Model 4 adds controls for other health characteristics. Model 5 adds controls for geographic characteristics. Survey weights are used for the analysis. Cluster robust standard errors at the census subdivision level are in parentheses.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

Source: *2017 Aboriginal Peoples Survey* (Statistics Canada 2018)

3.5 Sense of Belonging

Table 3.5.1: Individual's Sense of Belonging, Indigenous People, 2017 — Part I

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4	Model 5
	(Intercept)	-1.071***	-0.090	0.024	-0.371	-0.288
		(0.091)	(0.370)	(0.378)	(0.381)	(0.412)
Individual Socio-Demographic and Indigenous Characteristics	Age	0.023***	0.024***	0.024***	0.024***	0.024***
		(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
	Male	0.253***	0.269***	0.238***	0.228***	0.219***
		(0.049)	(0.049)	(0.050)	(0.050)	(0.051)
	Inuk (Inuit)	1.479***	1.353***	1.329***	1.297***	1.024***
		(0.148)	(0.152)	(0.153)	(0.152)	(0.147)
	Métis or Other Indigenous	-0.283****	-0.254***	-0.258***	-0.258***	-0.263***
		(0.056)	(0.057)	(0.058)	(0.059)	(0.058)
	Indigenous Citizenship	0.848***	0.850***	0.872***	0.874***	0.885***
		(0.054)	(0.053)	(0.053)	(0.053)	(0.053)
	Registered	0.371***	0.345***	0.317***	0.314***	0.335***
		(0.066)	(0.065)	(0.065)	(0.066)	(0.067)
	Indigenous Mother Tongue	1.084***	0.913***	0.909***	0.845***	0.759***
		(0.216)	(0.203)	(0.202)	(0.199)	(0.197)
	(Legally) Married	-0.378***	-0.342***	-0.289***	-0.287***	-0.249**
		(0.069)	(0.076)	(0.076)	(0.076)	(0.080)
	Common-Law	-0.153*	-0.109	-0.082	-0.101	-0.113
		(0.071)	(0.073)	(0.075)	(0.076)	(0.078)
	Separated	-0.074	-0.098	-0.043	-0.034	0.039
		(0.128)	(0.132)	(0.132)	(0.136)	(0.139)
	Divorced or Widowed	-0.208	-0.200	-0.158	-0.166	-0.134
		(0.114)	(0.113)	(0.113)	(0.113)	(0.115)

Table 3.5.1: Individual's Sense of Belonging, Indigenous People, 2017 — Part II

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4	Model 5
Dwelling and Household Characteristics	Rented (Non-Subsidized)		-0.311***	-0.276***	-0.265**	-0.218**
			(0.113)	(0.113)	(0.116)	(0.116)
	Owned		-0.464***	-0.390**	-0.356**	-0.365**
			(0.120)	(0.121)	(0.123)	(0.127)
	Apartment		-0.154	-0.083	-0.068	-0.033
			(0.163)	(0.166)	(0.163)	(0.167)
	Semi-Detached		-0.074	-0.024	-0.006	0.068
			(0.159)	(0.160)	(0.158)	(0.167)
	Single-Detached		0.105	0.153	0.160	0.135
			(0.142)	(0.144)	(0.141)	(0.147)
	Adequate Housing		-0.021	-0.006	-0.006	0.006
			(0.089)	(0.088)	(0.090)	(0.091)
	Suitable Housing		-0.285**	-0.274**	-0.257*	-0.261*
			(0.104)	(0.104)	(0.104)	(0.105)
	Affordable Housing		-0.126	-0.116	-0.104	-0.167*
			(0.088)	(0.087)	(0.088)	(0.084)
	Total After-Tax Income		-0.044	-0.027	-0.019	-0.004
			(0.030)	(0.028)	(0.028)	(0.025)
	Household Size		0.037	0.026	0.021	0.018
			(0.020)	(0.020)	(0.020)	(0.021)
	Household Maintainers		0.015	0.021	0.025	0.040
			(0.038)	(0.038)	(0.038)	(0.038)
	Multigenerational Household		0.036	0.007	0.001	0.045
			(0.084)	(0.084)	(0.084)	(0.084)
Individual Human Capital Characteristics	Secondary School			-0.099	-0.095	-0.048
				(0.094)	(0.094)	(0.094)
	Some Post-Secondary			-0.181*	-0.167*	-0.133
				(0.081)	(0.082)	(0.083)
	Below Undergraduate			-0.345***	-0.336***	-0.320***
				(0.080)	(0.081)	(0.082)
	Undergraduate or Above			-0.455***	-0.438***	-0.414***
				(0.100)	(0.103)	(0.109)
	Employed			-0.183	-0.163	-0.159
				(0.097)	(0.100)	(0.099)
Health Characteristics	Food Secure				-0.296***	-0.293***
					(0.058)	(0.058)
	Good General Health				0.092	0.079
					(0.074)	(0.075)
	Good Mental Health				0.424***	0.397***
					(0.081)	(0.079)

Table 3.5.1: Individual's Sense of Belonging, Indigenous People, 2017 — Part III

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4	Model 5
Geographic Characteristics	Atlantic Provinces					0.351**
						(0.128)
	British Columbia					-0.133
						(0.098)
	Manitoba					0.107
						(0.082)
	Ontario					0.084
						(0.084)
	Quebec					0.668***
						(0.094)
	Saskatchewan					0.253**
						(0.098)
	Territories					0.610**
						(0.227)
	Semi-Rural					-0.159*
						(0.072)
	Suburban					-0.112
						(0.087)
	Urban					-0.196**
						(0.070)
Mobility (1-Year)	Intraprovincial Migrant					-0.412
						(0.247)
	Moved Within Community					-0.288
						(0.219)
	Non-Mover					-0.219
						(0.210)
Mobility (5-Year)	Intraprovincial Migrant					0.010
						(0.145)
	Moved Within Community					0.044
						(0.135)
	Non-Mover					0.067
						(0.130)
	Deviance	1,062,663.68	1,056,283.17	1,052,058.07	1,045,462.47	1,033,964.66
	McFadden (Pseudo) R^2	0.096	0.101	0.105	0.110	0.120
	N	869,730	869,730	869,730	869,730	869,730

Note: The sample is restricted to Canadian-born Indigenous individuals aged 15 years or older residing outside of a reserve. Model 1 includes controls for individual socio-demographic and Indigenous characteristics. Model 2 adds controls for housing and household characteristics. Model 3 adds controls for individual human capital and labour market characteristics. Model 4 adds controls for other health characteristics. Model 5 adds controls for geographic characteristics. Survey weights are used for the analysis. Cluster robust standard errors at the census subdivision level are in parentheses.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

Source: *2017 Aboriginal Peoples Survey* (Statistics Canada 2018)

4.0 Education

4.2 School Attendance

Table 4.2.1: School Attendance, Indigenous Youth, 2016 – Part I

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4	Model 5
	(Intercept)	9.739***	8.345***	8.259***	8.459***	7.935***
		(0.368)	(0.518)	(0.546)	(0.585)	(0.640)
Youth Socio-Demographic and Indigenous Characteristics	Age	-0.462***	-0.467***	-0.466***	-0.467***	-0.469***
		(0.021)	(0.022)	(0.022)	(0.022)	(0.022)
	Male	-0.085*	-0.088*	-0.087*	-0.084*	-0.091*
		(0.038)	(0.038)	(0.038)	(0.038)	(0.038)
	Inuk (Inuit)	-0.853***	-0.541***	-0.151	-0.198	-0.207
		(0.109)	(0.111)	(0.156)	(0.157)	(0.161)
	Métis or Other Indigenous	-0.103	-0.160**	-0.163*	-0.162*	-0.096
		(0.062)	(0.060)	(0.070)	(0.070)	(0.071)
	Indigenous Citizen	-0.155	-0.104	-0.093	-0.097	-0.073
		(0.082)	(0.088)	(0.099)	(0.098)	(0.101)
	Registered	-0.110	-0.080	-0.037	-0.033	-0.014
		(0.082)	(0.085)	(0.093)	(0.093)	(0.095)
Dwelling and Household Characteristics	Rented (Non-Subsidized)		0.112	0.101	0.044	0.068
			(0.064)	(0.066)	(0.067)	(0.067)
	Owned		0.381***	0.370***	0.249**	0.228**
			(0.074)	(0.079)	(0.079)	(0.078)
	Apartment		0.227	0.219	0.147	-0.069
			(0.145)	(0.144)	(0.143)	(0.143)
	Semi-Detached		0.279	0.264	0.200	-0.017
			(0.143)	(0.142)	(0.141)	(0.141)
	Single-Detached		0.125	0.125	0.061	-0.097
			(0.136)	(0.135)	(0.134)	(0.131)
	Adequate Housing		0.083	0.084	0.067	0.083
			(0.065)	(0.066)	(0.065)	(0.066)
	Suitable Housing		0.276***	0.289***	0.270***	0.257***
			(0.061)	(0.064)	(0.065)	(0.064)
	Affordable Housing		-0.015	0.002	-0.023	-0.056
			(0.049)	(0.049)	(0.050)	(0.051)
	Total After-Tax Income		0.072**	0.076**	0.038	0.043
			(0.024)	(0.024)	(0.027)	(0.027)
	Household Size		-0.075**	-0.055	-0.047	-0.048
			(0.026)	(0.030)	(0.029)	(0.029)
	Children		0.046	0.036	0.038	0.053
			(0.033)	(0.036)	(0.037)	(0.036)
	Youths		0.141**	0.131**	0.125*	0.117*
			(0.048)	(0.049)	(0.049)	(0.049)
	Household Maintainers		0.023	0.034	0.044	0.045
			(0.040)	(0.040)	(0.041)	(0.039)
	Multigenerational Household		-0.333***	-0.372***	-0.332***	-0.317***
			(0.068)	(0.071)	(0.071)	(0.071)

Table 4.2.1: School Attendance, Indigenous Youth, 2016 – Part II

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4	Model 5
Primary Household Maintainer Socio-Demographic and Indigenous Characteristics	Age			0.002	0.003	0.002
				(0.003)	(0.003)	(0.003)
	Male			-0.138**	-0.073	-0.072
				(0.048)	(0.049)	(0.049)
	(Legally) Married			-0.038	-0.081	-0.096
				(0.075)	(0.076)	(0.077)
	Common-Law			-0.043	-0.046	-0.066
				(0.079)	(0.080)	(0.081)

Separated	-0.031	-0.077	-0.090
	(0.089)	(0.089)	(0.088)
Divorced or Widowed	0.018	-0.011	-0.009
	(0.079)	(0.078)	(0.078)
Inuk (Inuit)	-0.491[*]	-0.417[*]	-0.453[*]
	(0.202)	(0.201)	(0.215)
Métis and Other Indigenous	0.005	0.010	0.015
	(0.106)	(0.106)	(0.107)
Non-Indigenous	-0.005	-0.020	-0.015
	(0.100)	(0.100)	(0.104)
Indigenous Citizen	0.010	0.012	0.037
	(0.158)	(0.158)	(0.164)
Registered	-0.132	-0.134	-0.132
	(0.150)	(0.149)	(0.154)

Table 4.2.1: School Attendance, Indigenous Youth, 2016 – Part III

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4	Model 5
Primary Household Maintainer Human Capital and Labour Market Characteristics	Secondary School				0.219***	0.209***
					(0.060)	(0.061)
	Some Postsecondary				0.317***	0.288***
					(0.056)	(0.057)
	Below Undergraduate				0.177	0.216
					(0.143)	(0.143)
	Undergraduate or Above				0.690***	0.651***
					(0.091)	(0.093)
	Unemployed				0.004	0.012
					(0.095)	(0.097)
	Employed				0.034	0.020
					(0.091)	(0.091)
	Part-Time Weeks				0.117	0.099
					(0.177)	(0.179)
	Full-Time Weeks				0.135	0.127
					(0.173)	(0.175)
Primary Household Maintainer Industry of Employment (NAICS)	11-23, Primary				-0.155	-0.042
					(0.188)	(0.186)
	31-33, Manufacturing				-0.048	-0.022
					(0.212)	(0.210)
	41-49, Trade and Transportation				-0.123	-0.054
					(0.191)	(0.191)
	51-56 Professional Services				-0.017	0.025
					(0.195)	(0.195)
	61-62 Educational, Health, and Social Services				-0.057	0.001
					(0.181)	(0.181)
	71-72 Arts, Entertain., Rec., Accomm., Food Services				-0.102	-0.035
					(0.206)	(0.204)
	81 Other Services (Except Public Administration)				-0.124	-0.053
					(0.208)	(0.029)
	91 Public Administration				-0.082	-0.040
					(0.186)	(0.188)

Table 4.2.1: School Attendance, Indigenous Youth, 2016 – Part IV

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4	Model 5
Geographic Characteristics	Atlantic Provinces					0.400***
						(0.105)
	British Columbia					0.101
						(0.073)
	Manitoba					0.168*
						(0.078)
	Ontario					0.519***
						(0.072)
	Quebec					0.457***
						(0.100)
	Saskatchewan					0.064
						(0.083)
	Territories					0.365*
						(0.143)
	Semi-Rural					0.022
						(0.063)
	Suburban					0.187*
						(0.082)
	Urban					0.173**
						(0.062)
Mobility (1-Year)	Intraprovincial Migrant					0.406
						(0.210)
	Moved Within Community					0.531**
						(0.187)
	Non-Mover					0.692***
						(0.183)
Mobility (5-Year)	Intraprovincial Migrant					-0.322*
						(0.141)
	Moved Within Community					-0.372**
						(0.129)
	Non-Mover					-0.355**
						(0.131)
	Deviance	70,470.41	69,639.02	69,546.66	69,152.48	68,654.23
	McFadden (Pseudo) R^2	0.058	0.069	0.071	0.076	0.082
	N	89.520	89.520	89.520	89.520	89.520

Note: The sample is restricted to Canadian-born, Indigenous youth aged 15 to 18 years that resided outside of a reserve with a primary household maintainer aged 19 years or older. Model 1 includes controls for the youth's socio-demographic and Indigenous characteristics. Model 2 adds controls for dwelling and household characteristics. Model 3 adds controls for the primary household maintainer's socio-demographic and Indigenous characteristics. Model 4 adds controls for the primary household maintainer's human capital and labour market characteristics. Model 5 adds controls for geographic characteristics. Survey weights are used for the analysis. Cluster robust standard errors at the census subdivision level are in parentheses.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

Source: *2016 Census of Population* (Statistics Canada 2017b)

144

Table 4.2.2: School Attendance, Indigenous and Non-Indigenous Youth, 2016 – Part I

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4	Model 5
	(Intercept)	7.940***	6.807***	6.437***	6.867***	6.391***
		(0.280)	(0.276)	(0.271)	(0.272)	(0.281)
Youth Socio-Demographic and Indigenous Characteristics	Age	-0.352***	-0.374***	-0.377***	-0.372***	-0.373***
		(0.017)	(0.017)	(0.017)	(0.018)	(0.018)
	Male	-0.187***	-0.191***	-0.192***	-0.192***	-0.197***
		(0.014)	(0.014)	(0.014)	(0.014)	(0.014)
	Inuk (Inuit)	-0.841***	-0.595***	-0.314*	-0.374*	-0.452**
		(0.107)	(0.109)	(0.144)	(0.147)	(0.153)
	Métis or Other Indigenous	-0.104	-0.167**	-0.170*	-0.164*	-0.133
		(0.061)	(0.062)	(0.069)	(0.070)	(0.069)
	Non-Indigenous	0.293***	0.160**	0.116	0.071	-0.079
		(0.062)	(0.059)	(0.063)	(0.064)	(0.066)
	Indigenous Citizen	-0.149	-0.062	-0.103	-0.110	-0.080
		(0.082)	(0.088)	(0.099)	(0.098)	(0.099)
	Registered	-0.113	-0.089	-0.028	-0.020	0.001
		(0.081)	(0.085)	(0.092)	(0.091)	(0.094)
Dwelling and Household Characteristics	Rented (Non-Subsidized)		-0.061	-0.048	-0.133**	-0.116**
			(0.048)	(0.047)	(0.044)	(0.041)
	Owned		0.299***	0.295***	0.125*	0.080
			(0.055)	(0.056)	(0.048)	(0.042)
	Apartment		0.631***	0.622***	0.496***	0.072
			(0.083)	(0.081)	(0.080)	(0.064)
	Semi-Detached		0.574***	0.564***	0.436***	0.110
			(0.066)	(0.066)	(0.066)	(0.063)
	Single-Detached		0.397***	0.394***	0.277***	0.083
			(0.059)	(0.059)	(0.059)	(0.058)
	Adequate Housing		0.071**	0.081**	0.059*	0.042
			(0.026)	(0.026)	(0.026)	(0.026)
	Suitable Housing		0.189***	0.185***	0.141***	0.145***
			(0.036)	(0.037)	(0.036)	(0.031)
	Affordable Housing		0.117***	0.113***	0.050	-0.008
			(0.028)	(0.028)	(0.025)	(0.023)
	Total After-Tax Income		0.061***	0.061***	0.010	0.025**
			(0.008)	(0.009)	(0.010)	(0.010)
	Household Size		-0.022	-0.031*	-0.014	-0.027*
			(0.014)	(0.013)	(0.012)	(0.012)
	Children		-0.122***	-0.097***	-0.105***	-0.092***
			(0.013)	(0.013)	(0.013)	(0.012)
	Youths		0.180***	0.168***	0.160***	0.162***
			(0.017)	(0.017)	(0.017)	(0.018)
	Household Maintainers		0.031	0.026	0.037*	0.035*
			(0.016)	(0.018)	(0.017)	(0.016)
	Multigenerational Household		-0.121**	-0.151***	-0.076	-0.058
			(0.044)	(0.045)	(0.043)	(0.043)

Table 4.2.2: School Attendance, Indigenous and Non-Indigenous Youth, 2016 – Part II

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4	Model 5
Primary Household Maintainer Socio-Demographic and Indigenous Characteristics	Age			0.009***	0.008***	0.005***
				(0.001)	(0.001)	(0.001)
	Male			-0.163***	-0.075***	-0.062***
				(0.018)	(0.018)	(0.018)
	(Legally) Married			0.064	0.002	0.126***
				(0.042)	(0.041)	(0.034)
	Common-Law			0.155***	0.148***	0.110**
				(0.038)	(0.037)	(0.037)
	Separated			-0.005	-0.046	0.093**
				(0.036)	(0.037)	(0.034)
	Divorced or Widowed			-0.036	-0.057	0.044
				(0.032)	(0.033)	(0.031)
	Inuk (Inuit)			-0.324	-0.260	-0.352
				(0.170)	(0.173)	(0.185)
	Métis and Other Indigenous			0.034	0.045	0.075
				(0.083)	(0.083)	(0.084)
	Non-Indigenous			0.085	0.067	0.045
				(0.079)	(0.079)	(0.080)
	Indigenous Citizen			0.169	0.154	0.185
				(0.141)	(0.138)	(0.144)
	Registered			-0.190	-0.184	-0.168
				(0.121)	(0.123)	(0.126)

Table 4.2.2: School Attendance, Indigenous and Non-Indigenous Youth, 2016 – Part III

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4	Model 5
Primary Household Maintainer Human Capital Characteristics	Secondary School				0.179***	0.201***
					(0.034)	(0.035)
	Some Postsecondary				0.389***	0.362***
					(0.038)	(0.035)
	Below Undergraduate				0.491***	0.449***
					(0.061)	(0.056)
	Undergraduate or Above				0.787***	0.712***
					(0.052)	(0.049)
	Unemployed				0.138***	0.131***
					(0.038)	(0.038)
	Employed				0.247***	0.198***
					(0.035)	(0.035)
	Part-Time Weeks				0.106	0.129*
					(0.059)	(0.059)
	Full-Time Weeks				0.146**	0.146**
					(0.055)	(0.056)
Primary Household Maintainer Industry of Employment (NAICS)	11-23, Primary				-0.481***	-0.322***
					(0.066)	(0.069)
	31-33, Manufacturing				-0.178*	-0.170*
					(0.070)	(0.072)
	41-49, Trade and Transportation				-0.226***	-0.182*
					(0.068)	(0.071)
	51-56 Professional Services				-0.186**	-0.164*
					(0.072)	(0.074)
	61-62 Educational, Health, and Social Services				-0.220***	-0.174**
					(0.066)	(0.076)
	71-72 Arts, Entertain., Rec., Accomm., Food Services				-0.197**	-0.156*
					(0.076)	(0.076)
	81 Other Services (Except Public Administration)				-0.331***	-0.272**
					(0.074)	(0.076)
	91 Public Administration				-0.188**	-0.140*
					(0.071)	(0.071)

147

Table 4.2.2: School Attendance, Indigenous and Non-Indigenous Youth, 2016 – Part IV

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4	Model 5
Geographic Characteristics	Atlantic Provinces					0.251***
						(0.035)
	British Columbia					0.081*
						(0.038)
	Manitoba					0.031
						(0.034)
	Ontario					0.325***
						(0.030)
	Quebec					0.842***
						(0.036)
	Saskatchewan					-0.059
						(0.036)
	Territories					0.422***
						(0.119)
	Semi-Rural					0.131***
						(0.025)
	Suburban					0.191***
						(0.030)
	Urban					0.403***
						(0.028)
Mobility (1-Year)	Intraprovincial Migrant					0.156
						(0.090)
	Moved Within Community					0.304***
						(0.086)
	Non-Mover					0.451***
						(0.083)
Mobility (5-Year)	Intraprovincial Migrant					--0.081
						(0.053)
	Moved Within Community					-0.107*
						(0.047)
	Non-Mover					-0.076
						(0.048)
	Deviance	810,638.29	802,953.01	801,952.20	793,214.21	782,620.20
	McFadden (Pseudo) R^2	0.014	0.023	0.024	0.035	0.048
	N	1,300,195	1,300,195	1,300,195	1,300,195	1,300,195

Note: The sample is restricted to Canadian-born, Indigenous and non-Indigenous youth aged 15 to 18 years that resided outside of a reserve with a primary household maintainer aged 19 years or older. Model 1 includes controls for the youth's socio-demographic and Indigenous characteristics. Model 2 adds controls for dwelling and household characteristics. Model 3 adds controls for the primary household maintainer's socio-demographic and Indigenous characteristics. Model 4 adds controls for the primary household maintainer's human capital and labour market characteristics. Model 5 adds controls for geographic characteristics. Survey weights are used for the analysis. Cluster robust standard errors at the census subdivision level are in parentheses.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

Source: *2016 Census of Population* (Statistics Canada 2017b)

4.3 School Completion

Table 4.3.1: School Completion, Indigenous Youth, 2016 – Part I

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4	Model 5
	(Intercept)	-30.702***	-33.954***	-34.084***	-34.357***	-35.188***
		(0.590)	(0.942)	(0.960)	(0.962)	(1.014)
Youth Socio-Demographic and Indigenous Characteristics	Age	1.717***	1.726***	1.727***	1.736***	1.767***
		(0.034)	(0.035)	(0.035)	(0.035)	(0.035)
	Male	-0.334***	-0.333***	-0.336***	-0.336***	-0.343***
		(0.049)	(0.050)	(0.049)	(0.051)	(0.051)
	Inuk (Inuit)	-1.117***	-0.803***	-0.496*	-0.502*	-0.541*
		(0.132)	(0.129)	(0.234)	(0.233)	(0.240)
	Métis or Other Indigenous	0.216***	0.142*	0.051	0.046	0.065
		(0.064)	(0.068)	(0.081)	(0.081)	(0.079)
	Indigenous Citizen	-0.206*	-0.129	-0.210	-0.232*	-0.185
		(0.096)	(0.093)	(0.110)	(0.112)	(0.112)
	Registered	0.121	0.157	0.166	0.181	0.189
		(0.086)	(0.085)	(0.100)	(0.101)	(0.099)
Dwelling and Household Characteristics	Rented (Non-Subsidized)		0.277***	0.264**	0.207*	0.215*
			(0.084)	(0.086)	(0.087)	(0.096)
	Owned		0.548***	0.491***	0.407***	0.308**
			(0.097)	(0.097)	(0.096)	(0.104)
	Apartment		0.479**	0.461**	0.428**	0.245
			(0.160)	(0.159)	(0.161)	(0.156)
	Semi-Detached		0.399**	0.381*	0.347*	0.270
			(0.154)	(0.153)	(0.154)	(0.153)
	Single-Detached		0.242	0.218	0.183	0.200
			(0.148)	(0.147)	(0.148)	(0.148)
	Adequate Housing		0.044	0.032	0.037	0.051
			(0.076)	(0.078)	(0.077)	(0.078)
	Suitable Housing		0.162*	0.153	0.138	0.064
			0.076)	(0.085)	(0.085)	(0.086)
	Affordable Housing		-0.041	-0.039	-0.017	-0.056
			(0.077)	(0.077)	(0.076)	(0.079)
	Total After-Tax Income		0.223**	0.217**	0.177*	0.197*
			(0.081)	(0.081)	(0.081)	(0.088)
	Household Size		-0.035	-0.043	-0.036	-0.042
			(0.038)	(0.041)	(0.041)	(0.041)
	Children		-0.077	-0.060	-0.055	-0.043
			(0.041)	(0.041)	(0.041)	(0.041)
	Youths		-0.017	-0.024	-0.033	-0.047
			(0.056)	(0.055)	(0.056)	(0.053)
	Household Maintainers		0.050	0.052	0.061	0.064
			(0.039)	(0.039)	(0.039)	(0.040)
	Multigenerational Household		-0.152	-0.174	-0.125	-0.120
			(0.086)	(0.097)	(0.100)	(0.100)

Table 4.3.1: School Completion, Indigenous Youth, 2016 – Part II

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4	Model 5
Primary Household Maintainer Socio-Demographic and Indigenous Characteristics	Age			0.002	0.006	0.002
				(0.098)	(0.100)	(0.099)
	Male			0.052	0.045	0.040
				(0.055)	(0.061)	(0.061)
	(Legally) Married			0.086	0.056	0.123
				(0.105)	(0.102)	(0.101)
	Common-Law			-0.067	-0.070	-0.109
				(0.109)	(0.105)	(0.104)
	Separated			-0.057	-0.098	-0.018
				(0.101)	(0.100)	(0.101)
	Divorced or Widowed			0.164	0.139	0.216[*]
				(0.098)	(0.100)	(0.099)
	Inuk (Inuit)			-0.341	-0.302	-0.431
				(0.272)	(0.272)	(0.283)
	Métis and Other Indigenous			0.230	0.230	0.251[*]
				(0.124)	(0.125)	(0.124)
	Non-Indigenous			0.165	0.155	0.185
				(0.102)	(0.101)	(0.101)
	Indigenous Citizen			0.226	0.257	0.339
				(0.179)	(0.183)	(0.181)
	Registered			-0.028	-0.044	-0.044
				(0.155)	(0.158)	(0.155)

Table 4.3.1: School Completion, Indigenous Youth, 2016 – Part III

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4	Model 5
Primary Household Maintainer Human Capital Characteristics	Secondary School				0.407***	0.423***
					(0.070)	(0.071)
	Some Postsecondary				0.418***	0.392***
					(0.069)	(0.069)
	Below Undergraduate				0.500***	0.451***
					(0.149)	(0.147)
	Undergraduate or Above				0.463***	0.421***
					(0.096)	(0.093)
	Unemployed				0.005	0.006
					(0.156)	(0.158)
	Employed				0.008	-0.021
					(0.138)	(0.136)
	Part-Time Weeks				-0.509**	-0.502**
					(0.174)	(0.167)
	Full-Time Weeks				-0.582***	-0.556***
					(0.151)	(0.147)
Primary Household Maintainer Industry of Employment (NAICS)	11-23, Primary				0.816***	0.809***
					(0.209)	(0.203)
	31-33, Manufacturing				0.562*	0.486*
					(0.220)	(0.214)
	41-49, Trade and Transportation				0.609**	0.580**
					(0.195)	(0.192)
	51-56 Professional Services				0.759***	0.726***
					(0.210)	(0.208)
	61-62 Educational, Health, and Social Services				0.554**	0.551**
					(0.212)	(0.205)
	71-72 Arts, Entertain., Rec., Accomm., Food Services				0.911***	0.935***
					(0.224)	(0.220)
	81 Other Services (Except Public Administration)				0.737***	0.707***
					(0.211)	(0.205)
	91 Public Administration				0.683***	0.669***
					(0.202)	(0.196)

Table 4.3.1: School Completion, Indigenous Youth, 2016 – Part IV

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4	Model 5
Geographic Characteristics	Atlantic Provinces					-0.055
						(0.129)
	British Columbia					0.128
						(0.089)
	Manitoba					-0.484***
						(0.088)
	Ontario					-0.191*
						(0.079)
	Quebec					0.797***
						(0.101)
	Saskatchewan					-0.613***
						(0.126)
	Territories					-0.197
						(0.166)
	Semi-Rural					-0.092
						(0.073)
	Suburban					0.015
						(0.075)
	Urban					0.111
						(0.067)
Mobility (1-Year)	Intraprovincial Migrant					0.344
						(0.226)
	Moved Within Community					-0.094
						(0.214)
	Non-Mover					0.181
						(0.196)
Mobility (5-Year)	Intraprovincial Migrant					0.112
						(0.156)
	Moved Within Community					0.239
						(0.150)
	Non-Mover					0.324*
						(0.152)
	Deviance	57,473.51	56,495.16	56,389.82	56,026.98	54,888.50
	McFadden (Pseudo) R^2	0.318	0.330	0.331	0.335	0.349
	N	89,520	89,520	89,520	89,520	89,520

Note: The sample is restricted to Canadian-born, Indigenous youth aged 15 to 18 years that resided outside of a reserve with a primary household maintainer aged 19 years or older. Model 1 includes controls for the youth's socio-demographic and Indigenous characteristics. Model 2 adds controls for dwelling and household characteristics. Model 3 adds controls for the primary household maintainer's socio-demographic and Indigenous characteristics. Model 4 adds controls for the primary household maintainer's human capital and labour market characteristics. Model 5 adds controls for geographic characteristics. Cluster robust standard errors at the census subdivision level are in parentheses.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

Source: *2016 Census of Population* (Statistics Canada 2017b)

Table 4.3.2: School Completion, Indigenous and Non-Indigenous Youth, 2016 – Part I

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4	Model 5
	(Intercept)	-31.153***	-32.736***	-33.248***	-33.399***	-34.079***
		(0.411)	(0.422)	(0.451)	(0.453)	(0.445)
Youth Socio-Demographic and Indigenous Characteristics	Age	1.740***	1.741***	1.740***	1.749***	1.804***
		(0.023)	(0.022)	(0.022)	(0.021)	(0.020)
	Male	-0.248***	-0.249***	-0.251***	-0.252***	-0.265***
		(0.014)	(0.014)	(0.014)	(0.014)	(0.015)
	Inuk (Inuit)	-1.122***	-0.926***	-0.582**	-0.600**	-0.694**
		(0.133)	(0.128)	(0.223)	(0.223)	(0.245)
	Métis or Other Indigenous	0.215***	0.169*	0.117	0.111	0.092
		(0.064)	(0.066)	(0.075)	(0.076)	(0.074)
	Non-Indigenous	0.670***	0.543***	0.466***	0.445***	0.259***
		(0.061)	(0.060)	(0.065)	(0.064)	(0.062)
	Indigenous Citizen	-0.205*	-0.146	-0.164	-0.180	-0.151
		(0.096)	(0.094)	(0.102)	(0.103)	(0.104)
	Registered	0.121	0.138	0.119	0.129	0.143
		(0.087)	(0.086)	(0.095)	(0.096)	(0.097)
Dwelling and Household Characteristics	Rented (Non-Subsidized)		0.211***	0.207***	0.140***	0.068
			(0.045)	(0.047)	(0.043)	(0.049)
	Owned		0.541***	0.530***	0.423***	0.286***
			(0.059)	(0.057)	(0.049)	(0.050)
	Apartment		0.642***	0.630***	0.578***	0.200***
			(0.125)	(0.121)	(0.114)	(0.061)
	Semi-Detached		0.409***	0.406***	0.351***	0.180**
			(0.066)	(0.064)	(0.061)	(0.056)
	Single-Detached		0.316***	0.315***	0.265***	0.167**
			(0.055)	(0.056)	(0.057)	(0.054)
	Adequate Housing		0.110***	0.116***	0.107***	0.078**
			(0.026)	(0.027)	(0.027)	(0.026)
	Suitable Housing		-0.020	-0.012	-0.034	-0.086***
			(0.024)	(0.026)	(0.026)	(0.024)
	Affordable Housing		-0.002	-0.015	-0.031	-0.135***
			(0.025)	(0.024)	(0.022)	(0.018)
	Total After-Tax Income		0.070***	0.076***	0.044***	0.074***
			(0.013)	(0.013)	(0.011)	(0.012)
	Household Size		0.087***	0.090***	0.098***	0.089***
			(0.012)	(0.011)	(0.010)	(0.012)
	Children		-0.158***	-0.140***	-0.138***	-0.139***
			(0.010)	(0.013)	(0.013)	(0.011)
	Youths		-0.060***	-0.068***	-0.076***	-0.078***
			(0.016)	(0.017)	(0.017)	(0.016)
	Household Maintainers		-0.017	-0.004	0.005	0.003
			(0.010)	(0.013)	(0.013)	(0.012)
	Multigenerational Household		0.025	-0.019	0.029	0.088**
			(0.035)	(0.039)	(0.035)	(0.028)

Table 4.3.2: School Completion, Indigenous and Non-Indigenous Youth, 2016 – Part II

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4	Model 5
Primary Household Maintainer Socio-Demographic	Age			0.008***	0.010***	0.008***
				(0.002)	(0.002)	(0.001)
	Male			0.058***	0.083***	0.087***
				(0.015)	(0.016)	(0.016)
	(Legally) Married			-0.195***	-0.226***	0.035
				(0.048)	(0.048)	(0.038)
	Common-Law			0.015	0.007	-0.078*
				(0.035)	(0.036)	(0.033)
	Separated			-0.203***	-0.231***	0.071
				(0.039)	(0.040)	(0.041)
	Divorced or Widowed			-0.064	-0.077*	0.115***
				(0.034)	(0.034)	(0.028)
	Inuk (Inuit)			-0.399	-0.355	-0.499
				(0.252)	(0.250)	(0.276)
	Métis and Other Indigenous			0.164	0.174	0.191
				(0.096)	(0.097)	(0.099)
	Non-Indigenous			0.197*	0.187*	0.156
				0.081)	(0.082)	(0.084)
	Indigenous Citizen			0.081	0.095	0.131
				(0.150)	(0.151)	(0.154)
	Registered			0.036	0.036	0.046
				(0.130)	(0.132)	(0.134)

Table 4.3.2: School Completion, Indigenous and Non-Indigenous Youth, 2016 – Part III

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4	Model 5
Primary Household Maintainer Human Capital Characteristics	Secondary School				0.291***	0.355***
					(0.026)	(0.032)
	Some Postsecondary				0.343***	0.322***
					(0.027)	(0.027)
	Below Undergraduate				0.731***	0.638***
					(0.045)	(0.041)
	Undergraduate or Above				0.409***	0.354***
					(0.049)	(0.043)
	Unemployed				0.064	0.051
					(0.042)	(0.041)
	Employed				0.086*	0.042
					(0.037)	(0.035)
	Part-Time Weeks				-0.206***	-0.197***
					(0.052)	(0.054)
	Full-Time Weeks				-0.163***	-0.176***
					(0.048)	(0.050)
Primary Household Maintainer Industry of Employment (NAICS)	11-23, Primary				0.179**	0.278***
					(0.064)	(0.059)
	31-33, Manufacturing				0.232***	0.232***
					(0.057)	(0.055)
	41-49, Trade and Transportation				0.261***	0.286***
					(0.059)	(0.059)
	51-56 Professional Services				0.250***	0.269***
					(0.061)	(0.061)
	61-62 Educational, Health, and Social Services				0.223**	0.249***
					(0.056)	(0.057)
	71-72 Arts, Entertain., Rec., Accomm., Food Services				0.361***	0.388***
					(0.066)	(0.069)
	81 Other Services (Except Public Administration)				0.211***	0.241***
					(0.063)	(0.064)
	91 Public Administration				0.199**	0.244***
					(0.064)	(0.061)

Table 4.3.2: School Completion, Indigenous and Non-Indigenous Youth, 2016 – Part IV

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4	Model 5
Geographic Characteristics	Atlantic Provinces					-0.319***
						(0.086)
	British Columbia					0.002
						(0.040)
	Manitoba					-0.321***
						(0.051)
	Ontario					-0.193***
						(0.037)
	Quebec					0.866***
						(0.039)
	Saskatchewan					-0.535***
						(0.041)
	Territories					-0.070
						(0.144)
	Semi-Rural					-0.014
						(0.022)
	Suburban					0.080*
						(0.032)
	Urban					0.253*
						(0.029)
Mobility (1-Year)	Intraprovincial Migrant					-0.192*
						(0.080)
	Moved Within Community					-0.396***
						(0.081)
	Non-Mover					-0.390***
						(0.077)
Mobility (5-Year)	Intraprovincial Migrant					0.060
						(0.051)
	Moved Within Community					0.111*
						(0.044)
	Non-Mover					0.198***
						(0.043)
	Deviance	962,391.90	954,342.67	952940.34	949,593.96	921,351.26
	McFadden (Pseudo) R^2	0.334	0.340	0.341	0.343	0.362
	N	1,300,195	1,300,195	1,300,195	1,300,195	1,300,195

Note: The sample is restricted to Indigenous youth that are Canadian-born, aged 15 to 18 years, with a primary household maintainer aged 19 years or older, and residing outside of a reserve. Model 1 includes controls for the youth's socio-demographic and Indigenous characteristics. Model 2 adds controls for dwelling and household characteristics. Model 3 adds controls for the primary household maintainer's socio-demographic and Indigenous characteristics. Model 4 adds controls for the primary household maintainer's human capital and labour market characteristics. Model 5 adds controls for geographic characteristics. Survey weights are used for the analysis. Cluster robust standard errors at the census subdivision level are in parentheses.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

Source: *2016 Census of Population* (Statistics Canada 2017b)

5.0 Labour

5.2 Labour Force Participation

Table 5.2.1: Labour Force Participation, Indigenous Individuals, 2016 – Part I

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4
	(Intercept)	1.346***	-4.310***	-3.474***	-3.251***
		(0.051)	(0.290)	(0.257)	(0.271)
Individual Socio-Demographic and Indigenous Characteristics	Age	-0.035***	-0.043***	-0.043***	-0.043***
		(0.001)	(0.001)	(0.001)	(0.001)
	Male	0.303***	0.277***	0.393***	0.396***
		(0.012)	(0.012)	(0.013)	(0.013)
	(Legally) Married	1.109***	0.833***	0.683***	0.698***
		(0.023)	(0.023)	(0.023)	(0.023)
	Common-Law	1.087***	0.877***	0.805***	0.805***
		(0.022)	(0.024)	(0.023)	(0.023)
	Separated	0.969***	1.083***	0.933***	0.932***
		(0.042)	(0.043)	(0.040)	(0.041)
	Divorced or Widowed	0.503***	0.529***	0.425***	0.423***
		(0.027)	(0.030)	(0.027)	(0.028)
	Inuit	-0.190***	0.339***	0.537***	0.389***
		(0.053)	(0.061)	(0.070)	(0.084)
	Métis or Other Indigenous	0.156***	0.083***	0.068***	0.037
		(0.020)	(0.018)	(0.020)	(0.019)
	Indigenous Citizen	-0.119***	-0.032	-0.047	-0.078**
		(0.027)	(0.023)	(0.025)	(0.024)
	Registered	-0.118***	-0.075***	-0.051*	-0.055*
		(0.026)	(0.020)	(0.022)	(0.021)

Table 5.2.1: Labour Force Participation, Indigenous Individuals, 2016 – Part II

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4
Dwelling and Household Characteristics	Rented (Non-Subsidized)		0.720***	0.658***	0.694***
			(0.055)	(0.056)	(0.055)
	Owned		0.785***	0.635***	0.718***
			(0.060)	(0.056)	(0.056)
	Apartment		0.153***	-0.071	-0.018
			(0.039)	(0.037)	(0.036)
	Semi-Detached		0.162***	-0.020	0.030
			(0.043)	(0.042)	(0.040)
	Single-Detached		0.108**	-0.041	0.014
			(0.034)	(0.035)	(0.034)
	Adequate Housing		0.017	0.001	0.007
			(0.017)	(0.018)	(0.017)
	Suitable Housing		0.049*	0.017	0.046
			(0.025)	(0.024)	(0.024)
	Affordable Housing		0.181***	0.236***	0.268***
			(0.031)	(0.030)	(0.031)
	Total After-Tax Income		0.511***	0.367***	0.335***
			(0.033)	(0.030)	(0.032)
	Household Size		-0.253***	-0.198***	-0.194***
			(0.011)	(0.011)	(0.010)
	Children		0.128***	0.087***	0.076***
			(0.012)	(0.012)	(0.011)
	Youths		-0.506***	-0.318***	-0.305***
			(0.013)	(0.013)	(0.012)
	Household Maintainers		0.189***	0.184***	0.183***
			(0.011)	(0.012)	(0.011)
	Multigenerational Household		-0.075**	-0.020	-0.029
			(0.023)	(0.023)	(0.022)
Individual Human Capital Characteristics	Secondary School			1.012***	1.023***
				(0.020)	(0.020)
	Some Post-Secondary			1.426***	1.448***
				(0.023)	(0.023)
	Below Undergraduate			1.427***	1.436***
				(0.042)	(0.042)
	Undergraduate or Above			1.761***	1.785***
				(0.037)	(0.035)

Table 5.2.1: Labour Force Participation, Indigenous Individuals, 2016 – Part III

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4
Geographic Characteristics	Atlantic Provinces				-0.331***
					(0.048)
	British Columbia				-0.048
					(0.040)
	Manitoba				-0.068
					(0.060)
	Ontario				-0.219***
					(0.040)
	Quebec				-0.216***
					(0.049)
	Saskatchewan				-0.043
					(0.044)
	Territories				0.267***
					(0.075)
	Semi-Rural				0.023
					(0.022)
	Suburban				-0.050
					(0.031)
	Urban				0.027
					(0.025)
Mobility (1-Year)	Intraprovincial Migrant				0.068
					(0.052)
	Moved Within Community				0.162**
					(0.055)
	Non-Mover				0.138**
					(0.050)
Mobility (5-Year)	Intraprovincial Migrant				-0.117***
					(0.032)
	Moved Within Community				0.025
					(0.030)
	Non-Mover				-0.095**
					(0.033)
	Deviance	1,196,769.55	1,121,208.95	1,054,537.41	1,051,009.67
	McFadden (Pseudo) R^2	0.065	0.124	0.176	0.179
	N	982,735	982,735	982,735	982,735

Note: The sample is restricted to Canadian-born, Indigenous people aged 15 years or older that resided outside of a reserve. Model 1 includes controls for individual socio-demographic and Indigenous characteristics. Model 2 adds controls for dwelling and household characteristics. Model 3 adds controls for individual human capital characteristics. Model 4 adds controls for geographic characteristics. Survey weights are used for the analysis. Cluster robust standard errors at the census subdivision level are in parentheses.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

Source: *2016 Census of Population* (Statistics Canada 2017b)

Table 5.2.2: Labour Force Participation, Indigenous and Non-Indigenous Individuals, 2016 – Part I

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4
	(Intercept)	2.280***	-2.205***	-1.470***	-1.668***
		(0.056)	(0.224)	(0.158)	(0.159)
Individual Socio-Demographic and Indigenous Characteristics	Age	-0.063***	-0.071***	-0.072***	-0.072***
		(0.002)	(0.001)	(0.001)	(0.001)
	Male	0.365***	0.361***	0.436***	0.435***
		(0.014)	(0.013)	(0.012)	(0.012)
	(Legally) Married	1.343***	1.223***	1.090***	1.082***
		(0.047)	(0.042)	(0.037)	(0.039)
	Common-Law	1.609***	1.445***	1.365***	1.369***
		(0.033)	(0.037)	(0.033)	(0.033)
	Separated	1.459***	1.571***	1.458***	1.457***
		(0.050)	(0.052)	(0.043)	(0.047)
	Divorced or Widowed	0.919***	0.975***	0.911***	0.908***
		(0.058)	(0.060)	(0.050)	(0.052)
	Inuit	-0.282***	0.413***	0.641***	0.342***
		(0.061)	(0.069)	(0.078)	(0.092)
	Métis or Other Indigenous	0.232***	0.164***	0.146***	0.104***
		(0.024)	(0.022)	(0.024)	(0.024)
	Non-Indigenous	0.371***	0.228***	0.118***	0.132***
		(0.022)	(0.018)	(0.023)	(0.022)
	Indigenous Citizen	-0.149***	-0.055*	-0.067*	-0.116***
		(0.032)	(0.027)	(0.028)	(0.027)
	Registered	-0.120***	-0.075**	-0.048	-0.054*
		(0.029)	(0.024)	(0.025)	(0.025)

Table 5.2.2: Labour Force Participation, Indigenous and Non-Indigenous Individuals, 2016 – Part II

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4
Dwelling and Household Characteristics	Rented (Non-Subsidized)		1.033***	0.971***	0.999***
			(0.037)	(0.032)	(0.029)
	Owned		1.017***	0.846***	0.877***
			(0.034)	(0.028)	(0.028)
	Apartment		0.076**	-0.156***	-0.067***
			(0.029)	(0.020)	(0.019)
	Semi-Detached		0.066**	-0.120***	-0.044**
			(0.024)	(0.021)	(0.016)
	Single-Detached		0.030	-0.117***	-0.079***
			(0.018)	(0.017)	(0.015)
	Adequate Housing		-0.056***	-0.073***	-0.064***
			(0.008)	(0.008)	(0.007)
	Suitable Housing		0.125***	0.115***	0.127***
			(0.030)	(0.029)	(0.028)
	Affordable Housing		0.055	0.085**	0.105***
			(0.028)	(0.029)	(0.029)
	Total After-Tax Income		0.397***	0.259***	0.248***
			(0.028)	(0.022)	(0.021)
	Household Size		-0.229***	-0.185***	-0.176***
			(0.012)	(0.009)	(0.008)
	Children		0.132***	0.087***	0.075***
			(0.015)	(0.014)	(0.013)
	Youths		-0.652***	-0.425***	-0.420***
			(0.030)	(0.020)	(0.019)
	Household Maintainers		0.154***	0.149***	0.151***
			(0.009)	(0.009)	(0.009)
	Multigenerational Household		-0.129***	-0.050*	-0.045*
			(0.020)	(0.020)	(0.019)
Individual Human Capital Characteristics	Secondary School			1.080***	1.091***
				(0.022)	(0.022)
	Some Post-Secondary			1.529***	1.547***
				(0.033)	(0.032)
	Below Undergraduate			1.383***	1.398***
				(0.037)	(0.037)
	Undergraduate or Above			1.656***	1.693***
				(0.049)	(0.050)

Table 5.2.2: Labour Force Participation, Indigenous and Non-Indigenous Individuals, 2016 – Part III

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4
Geographic Characteristics	Atlantic Provinces				-0.271***
					(0.025)
	British Columbia				-0.167***
					(0.022)
	Manitoba				0.008
					(0.042)
	Ontario				-0.180***
					(0.019)
	Quebec				-0.190***
					(0.021)
	Saskatchewan				0.108**
					(0.038)
	Territories				0.390***
					(0.061)
	Semi-Rural				-0.101***
					(0.012)
	Suburban				-0.161***
					(0.021)
	Urban				-0.136***
					(0.017)
Mobility (1-Year)	Intraprovincial Migrant				0.161***
					(0.021)
	Moved Within Community				0.259***
					(0.023)
	Non-Mover				0.267***
					(0.020)
Mobility (5-Year)	Intraprovincial Migrant				0.079***
					(0.022)
	Moved Within Community				0.278***
					(0.024)
	Non-Mover				0.159***
					(0.024)
	Deviance	22,099,161.12	21,166,566.39	20,091,670.62	20,041,558.21
	McFadden (Pseudo) R^2	0.160	0.196	0.237	0.239
	N	20,645,125	20,645,125	20,645,125	20,645,125

Note: The sample is restricted to Canadian-born, Indigenous and non-Indigenous people aged 15 years or older that resided outside of a reserve. Model 1 includes controls for individual socio-demographic and Indigenous characteristics. Model 2 adds controls for dwelling and household characteristics. Model 3 adds controls for individual human capital characteristics. Model 4 adds controls for geographic characteristics. Cluster robust standard errors at the census subdivision level are in parentheses.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

Source: *2016 Census of Population* (Statistics Canada 2017b)

5.3 Full-Time Work Status

Table 5.3.1: Full-Time Work Status, Indigenous Workers, 2016 – Part I

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4
	(Intercept)	-0.516***	-4.003***	-2.612***	-2.417***
		(0.037)	(0.308)	(0.230)	(0.253)
Individual Socio-Demographic and Indigenous Characteristics	Age	0.025***	0.022***	0.019***	0.021***
		(0.001)	(0.001)	(0.001)	(0.001)
	Male	0.840***	0.865***	0.699***	0.702***
		(0.023)	(0.023)	(0.021)	(0.020)
	(Legally) Married	0.665***	0.569***	0.464***	0.456***
		(0.026)	(0.026)	(0.026)	(0.026)
	Common-Law	0.780***	0.628***	0.557***	0.516***
		(0.027)	(0.027)	(0.027)	(0.027)
	Separated	0.630***	0.641***	0.578***	0.550***
		(0.050)	(0.049)	(0.049)	(0.049)
	Divorced or Widowed	0.359***	0.325***	0.278***	0.251***
		(0.035)	(0.034)	(0.035)	(0.036)
	Inuit	0.026	0.259***	0.293***	0.231***
		(0.075)	(0.068)	(0.068)	(0.064)
	Métis or Other Indigenous	0.022	0.004	-0.014	-0.053**
		(0.021)	(0.021)	(0.021)	(0.020)
	Indigenous Citizen	0.026	0.053	0.045	0.026
		(0.028)	(0.029)	(0.030)	(0.030)
	Registered	0.024	0.033	0.032	0.025
		(0.028)	(0.028)	(0.029)	(0.029)

Table 5.3.1: Full-Time Work Status, Indigenous Workers, 2016 – Part II

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4
Dwelling and Household Characteristics	Rented (Non-Subsidized)		0.543***	0.500***	0.479***
			(0.041)	(0.040)	(0.038)
	Owned		0.384***	0.267***	0.344***
			(0.041)	(0.040)	(0.039)
	Apartment		0.080	-0.008	0.018
			(0.053)	(0.055)	(0.052)
	Semi-Detached		0.139*	0.053	0.075
			(0.062)	(0.063)	(0.059)
	Single-Detached		0.027	-0.077	-0.061
			(0.055)	(0.056)	(0.053)
	Adequate Housing		0.104***	0.095***	0.072**
			(0.024)	(0.025)	(0.024)
	Suitable Housing		-0.133***	-0.133***	-0.097***
			(0.028)	(0.030)	(0.029)
	Affordable Housing		0.375***	0.373***	0.387***
			(0.033)	(0.027)	(0.028)
	Total After-Tax Income		0.316***	0.239***	0.233***
			(0.033)	(0.023)	(0.023)
	Household Size		-0.268***	-0.222***	-0.200***
			(0.013)	(0.012)	(0.012)
	Children		0.253***	0.206***	0.182***
			(0.015)	(0.014)	(0.014)
	Youths		-0.510***	-0.399***	-0.372***
			(0.016)	(0.017)	(0.017)
	Household Maintainers		0.082***	0.094***	0.084***
			(0.012)	(0.012)	(0.012)
	Multigenerational Household		0.242***	0.274***	0.253***
			(0.031)	(0.032)	(0.031)

Table 5.3.1: Full-Time Status, Indigenous Workers, 2016 – Part III

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4
Individual Human Capital Characteristics	Secondary School			0.467***	0.476***
				(0.023)	(0.024)
	Some Postsecondary			0.695***	0.701***
				(0.023)	(0.023)
	Below Undergraduate			0.678***	0.682***
				(0.051)	(0.051)
	Undergraduate or Above			0.901***	0.894***
				(0.036)	(0.035)
Industry of Employment (NAICS)	31-33, Manufacturing			0.322***	0.365**
				(0.051)	(0.051)
	41-49, Trade and Transportation			-1.000***	-0.983***
				(0.032)	(0.031)
	51-56 Professional Services			-0.754***	-0.739***
				(0.035)	(0.035)
	61-62 Educational, Health, and Social Services			-0.950***	-0.943***
				(0.036)	(0.034)
	71-72 Arts, Entertain., Rec., Accomm., Food Services			-1.341***	-1.326***
				(0.038)	(0.037)
	81 Other Services (Except Public Administration)			-0.892***	-0.879***
				(0.039)	(0.039)
	91 Public Administration			-0.018	-0.018
				(0.046)	(0.046)

Table 5.3.1: Full-Time Status, Indigenous Workers, 2016 – Part IV

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4
Geographic Characteristics	Atlantic Provinces				-0.000
					(0.046)
	British Columbia				-0.280***
					(0.038)
	Manitoba				-0.040
					(0.047)
	Ontario				-0.225***
					(0.035)
	Quebec				-0.092*
					(0.044)
	Saskatchewan				0.124**
					(0.044)
	Territories				0.025
					(0.078)
	Semi-Rural				0.075**
					(0.027)
	Suburban				0.021
					(0.035)
	Urban				0.061*
					(0.024)
Mobility (1-Year)	Intraprovincial Migrant				-0.133
					(0.070)
	Moved Within Community				-0.124
					(0.072)
	Non-Mover				-0.192**
					(0.068)
Mobility (5-Year)	Intraprovincial Migrant				0.014
					(0.049)
	Moved Within Community				0.061
					(0.041)
	Non-Mover				-0.184***
					(0.042)
	Deviance	584,068.26	564,539.19	539,659.24	537,092.01
	McFadden (Pseudo) R^2	0.073	0.104	0.143	0.147
	N	588,595	588,595	588,595	588,595

Note: The sample is restricted to Canadian-born, Indigenous workers aged 15 years or older that resided outside of a reserve. Model 1 includes controls for individual socio-demographic and Indigenous characteristics. Model 2 adds controls for dwelling and household characteristics. Model 3 adds controls for individual human capital characteristics. Model 4 adds controls for geographic characteristics. Cluster robust standard errors at the census subdivision level are in parentheses.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

Source*: 2016 Census of Population* (Statistics Canada 2017b)

Table 5.3.2: Full-Time Work Status, Indigenous and Non-Indigenous Workers, 2016 – Part I

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4
	(Intercept)	-0.278***	-2.915***	-1.786***	-1.785***
		(0.035)	(0.144)	(0.106)	(0.108)
Individual Socio-Demographic and Indigenous Characteristics	Age	0.014***	0.009***	0.006***	0.009***
		(0.001)	(0.001)	(0.001)	(0.001)
	Male	0.907***	0.941***	0.797***	0.798***
		(0.033)	(0.030)	(0.026)	(0.026)
	(Legally) Married	0.833***	0.802***	0.696***	0.652***
		(0.033)	(0.030)	(0.026)	(0.030)
	Common-Law	1.188***	1.027***	0.946***	0.894***
		(0.035)	(0.038)	(0.035)	(0.033)
	Separated	0.927***	0.914***	0.863***	0.796***
		(0.045)	(0.041)	(0.036)	(0.041)
	Divorced or Widowed	0.612***	0.556***	0.536***	0.493***
		(0.047)	(0.045)	(0.040)	(0.043)
	Inuit	0.007	0.385***	0.410***	0.304***
		(0.076)	(0.075)	(0.076)	(0.080)
	Métis or Other Indigenous	0.032	0.019	-0.003	-0.010
		(0.021)	(0.021)	(0.021)	(0.020)
	Non-Indigenous	0.058**	0.018	-0.048**	-0.036*
		(0.021)	(0.019)	(0.018)	(0.016)
	Indigenous Citizenship	0.039	0.071*	0.066*	0.057
		(0.029)	(0.031)	(0.032)	(0.032)
	Registration Status	0.023	0.039	0.042	0.035
		(0.029)	(0.028)	(0.030)	(0.030)

Table 5.3.2: Full-Time Status, Indigenous and Non-Indigenous Workers, 2016 – Part II

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4
Dwelling and Household Characteristics	Rented (Non-Subsidized)		0.758***	0.686***	0.659***
			(0.036)	(0.034)	(0.030)
	Owned		0.666***	0.511***	0.571***
			(0.034)	(0.032)	(0.028)
	Apartment		0.098**	-0.024	0.003
			(0.031)	(0.025)	(0.022)
	Semi-Detached		0.113***	0.017	0.027
			(0.023)	(0.023)	(0.021)
	Single-Detached		-0.021	-0.131***	-0.112***
			(0.019)	(0.020)	(0.019)
	Adequate Housing		0.038***	0.025*	0.019*
			(0.010)	(0.010)	(0.009)
	Suitable Housing		-0.130***	-0.140***	-0.112***
			(0.026)	(0.025)	(0.025)
	Affordable Housing		0.386***	0.388***	0.397***
			(0.016)	(0.015)	(0.020)
	Total After-Tax Income		0.239***	0.187***	0.188***
			(0.011)	(0.007)	(0.007)
	Household Size		-0.311***	-0.281***	-0.256***
			(0.013)	(0.012)	(0.011)
	Children		0.314***	0.270***	0.252***
			(0.018)	(0.017)	(0.018)
	Youths		-0.574***	-0.442***	-0.421***
			(0.011)	(0.010)	(0.010)
	Household Maintainers		0.076***	0.089***	0.080***
			(0.008)	(0.007)	(0.007)
	Multigenerational Household		0.243***	0.292***	0.264***
			(0.016)	(0.016)	(0.014)

Table 5.3.2: Full-Time Status, Indigenous and Non-Indigenous Workers, 2016 – Part III

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4
Individual Human Capital Characteristics	Secondary School			0.410***	0.409***
				(0.021)	(0.022)
	Some Postsecondary			0.751***	0.747***
				(0.030)	(0.029)
	Below Undergraduate			0.707***	0.710***
				(0.032)	(0.031)
	Undergraduate or Above			0.916***	0.900***
				(0.029)	(0.029)
Industry of Employment (NAICS)	31-33, Manufacturing			0.481***	0.494***
				(0.029)	(0.025)
	41-49, Trade and Transportation			-0.893***	-0.888***
				(0.020)	(0.018)
	51-56 Professional Services			-0.577***	-0.574***
				(0.026)	(0.024)
	61-62 Educational, Health, and Social Services			-0.953***	-0.951***
				(0.025)	(0.023)
	71-72 Arts, Entertain., Rec., Accomm., Food Services			-1.397***	-1.392***
				(0.024)	(0.022)
	81 Other Services (Except Public Administration)			-0.901***	-0.897***
				(0.018)	(0.017)
	91 Public Administration			0.034	0.029
				(0.039)	(0.039)

169

Table 5.3.2: Full-Time Work Status, Indigenous and Non-Indigenous Workers, 2016 – Part IV

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4
Geographic Characteristics	Atlantic Provinces				0.160***
					(0.034)
	British Columbia				-0.188***
					(0.032)
	Manitoba				0.010
					(0.027)
	Ontario				-0.044
					(0.028)
	Quebec				-0.068*
					(0.031)
	Saskatchewan				0.076
					(0.040)
	Territories				0.207*
					(0.110)
	Semi-Rural				0.035**
					(0.011)
	Suburban				0.001
					(0.022)
	Urban				0.033*
					(0.013)
Mobility (1-Year)	Intraprovincial Migrant				-0.068*
					(0.035)
	Moved Within Community				-0.079*
					(0.037)
	Non-Mover				-0.113***
					(0.034)
Mobility (5-Year)	Intraprovincial Migrant				-0.009
					(0.032)
	Moved Within Community				0.060*
					(0.030)
	Non-Mover				-0.213***
					(0.033)
	Deviance	12,515,158.33	12,093,939.46	11,549,858.39	11,515,323.91
	McFadden (Pseudo) R^2	0.079	0.110	0.150	0.153
	N	13,176,955	13,176,955	13,176,955	13,176,955

Note: The sample is restricted to Canadian-born, Indigenous and non-Indigenous workers aged 15 years or older that resided outside of a reserve. Model 1 includes controls for individual socio-demographic and Indigenous characteristics. Model 2 adds controls for dwelling and household characteristics. Model 3 adds controls for individual human capital characteristics. Model 4 adds controls for geographic characteristics. Cluster robust standard errors at the census subdivision level are in parentheses.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

Source: *2016 Census of Population* (Statistics Canada 2017b)

5.4 Job Satisfaction

Table 5.4.1: Individual's Job Satisfaction, Indigenous Individuals, 2017 — Part I

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4
	(Intercept)	1.903***	-0.036	0.134	-0.263
		(0.167)	(0.563)	(0.546)	(0.619)
Individual Socio-Demographic and Indigenous Characteristics	Age	-0.000	0.004	0.002	-0.001
		(0.004)	(0.005)	(0.005)	(0.004)
	Male	-0.099	-0.120	-0.167	-0.177
		(0.087)	(0.088)	(0.095)	(0.094)
	Inuk (Inuit)	0.197	0.173	0.073	-0.029
		(0.154)	(0.183)	(0.178)	(0.188)
	Métis or Other Indigenous	0.083	0.061	0.035	0.032
		(0.112)	(0.114)	(0.114)	(0.112)
	Indigenous Citizenship	0.304*	0.277	0.268	0.272
		(0.142)	(0.142)	(0.141)	(0.140)
	Registered	-0.062	-0.033	-0.068	-0.087
		(0.151)	(0.145)	(0.145)	(0.146)
	(Legally) Married	0.549***	0.299	0.227	0.261
		(0.160)	(0.156)	(0.157)	(0.146)
	Common-Law	0.465**	0.341*	0.240	0.283*
		(0.146)	(0.148)	(0.146)	(0.144)
	Separated	0.009	-0.003	-0.096	-0.003
		(0.268)	(0.276)	(0.276)	(0.270)
	Divorced or Widowed	-0.053	-0.032	-0.073	-0.025
		(0.272)	(0.270)	(0.266)	(0.251)

Table 5.4.1: Individual's Job Satisfaction, Indigenous People, 2017 — Part II

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4
Dwelling and Household Characteristics	Rented (Non-Subsidized)		-0.197	-0.227	-0.182
			(0.215)	(0.218)	(0.225)
	Owned		0.001	-0.003	-0.034
			(0.202)	(0.208)	(0.212)
	Apartment		0.213	0.281	0.388
			(0.339)	(0.331)	(0.349)
	Semi-Detached		0.046	0.090	0.212
			(0.337)	(0.332)	(0.347)
	Single-Detached		0.210	0.210	0.210
			(0.304)	(0.300)	(0.303)
	Adequate Housing		0.424**	0.443**	0.462**
			(0.149)	(0.145)	(0.141)
	Suitable Housing		-0.057	-0.012	-0.007
			(0.145)	(0.143)	(0.148)
	Affordable Housing		0.118	0.054	0.043
			(0.163)	(0.157)	(0.156)
	Total After-Tax Income		0.105**	0.103**	0.104**
			(0.036)	(0.036)	(0.036)
	Household Size		0.096*	0.107*	0.099*
			(0.042)	(0.042)	(0.042)
	Household Maintainers		0.008	0.009	0.024
			(0.081)	(0.083)	(0.084)
	Multigenerational Household		-0.704***	-0.731***	-0.721***
			(0.190)	(0.194)	(0.192)

Table 5.4.1: Individual's Job Satisfaction, Indigenous Individuals, 2017 — Part III

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4
Individual Human Capital Characteristics	Secondary School			-0.232	-0.205
				(0.161)	(0.159)
	Some Post-Secondary			-0.290	-0.243
				(0.193)	(0.188)
	Below Undergraduate			0.028	0.070
				(0.146)	(0.152)
	Undergraduate or Above			-0.380[*]	-0.291
				(0.171)	(0.181)
	Full-Time Work Status			0.432[***]	0.450[***]
				(0.105)	(0.102)
Industry of employment NAICS	31-33, Manufacturing			-0.501	-0.485
				(0.275)	(0.265)
	41-49, Trade and Transportation			-0.450[*]	-0.467[*]
				(0.193)	(0.196)
	51-56 Professional Services			-0.323	-0.323
				(0.186)	(0.188)
	61-62 Educational, Health, and Social Services			0.023	0.009
				(0.196)	(0.193)
	71-72 Arts, Entertain., Rec., Accomm., Food Services			-0.256	-0.280
				(0.232)	(0.231)
	81 Other Services (Except Public Administration)			-0.126	-0.138
				(0.250)	(0.251)
	91 Public Administration			-0.140	-0.130
				(0.211)	(0.209)

Table 5.4.1: Individual's Job Satisfaction, Indigenous People, 2017 — Part IV

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4
Geographic Characteristics	Atlantic Provinces				0.103
					(0.190)
	British Columbia				0.223
					(0.171)
	Manitoba				0.006
					(0.165)
	Ontario				-0.086
					(0.178)
	Quebec				0.087
					(0.179)
	Saskatchewan				0.021
					(0.196)
	Territories				0.037
					(0.209)
	Semi-Rural				0.261
					(0.156)
	Suburban				-0.153
					(0.184)
	Urban				-0.089
					(0.128)
Mobility (1-Year)	Intraprovincial Migrant				0.202
					(0.410)
	Moved Within Community				0.088
					(0.359)
	Non-Mover				0.037
					(0.338)
Mobility (5-Year)	Intraprovincial Migrant				0.247
					(0.334)
	Moved Within Community				0.127
					(0.301)
	Non-Mover				0.437
					(0.324)
	Deviance	331,868.36	327,796.65	323,614	321,524.42
	McFadden (Pseudo) R^2	0.002	0.014	0.027	0.033
	N	545,330	545,330	545,330	545,330

Note: The sample is restricted to employed, Canadian-born, Indigenous people aged 15 years or older that resided outside of a reserve. Model 1 includes controls for individual socio-demographic and Indigenous characteristics. Model 2 adds controls for dwelling and household characteristics. Model 3 adds controls for individual human capital and labour market characteristics. Model 4 adds controls for geographic characteristics. Cluster robust standard errors at the census subdivision level are in parentheses.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

Source: *2017 Aboriginal Peoples Survey* (Statistics Canada 2018)

6.0 Language

6.2 Indigenous Language Use at Home

Table 6.2.1: Child's Use of Indigenous Language at Home, 2016 — Part I

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4	Model 5
	(Intercept)	-4.769***	-3.082***	-3.260***	-3.039***	-2.454***
		(0.127)	(0.654)	(0.698)	(0.591)	(0.607)
Child Socio-Demographic and Indigenous Characteristics	Age	-0.017***	-0.005	0.001	0.003	-0.011
		(0.004)	(0.005)	(0.004)	(0.004)	(0.007)
	Male	-0.117**	-0.123***	-0.126***	-0.131***	-0.128***
		(0.037)	(0.036)	(0.036)	(0.036)	(0.036)
	Inuit	3.136***	2.776***	2.959***	2.838***	2.457***
		(0.270)	(0.294)	(0.381)	(0.382)	(0.305)
	Métis or Other Indigenous	-0.899***	-0.776***	-0.678***	-0.709***	-0.698***
		(0.190)	(0.194)	(0.191)	(0.192)	(0.187)
	Indigenous Citizen	1.150***	1.116***	0.817***	0.779***	0.748***
		(0.132)	(0.140)	(0.157)	(0.166)	(0.170)
	Registered	0.649***	0.583***	0.458**	0.385*	0.342*
		(0.132)	(0.139)	(0.154)	(0.162)	(0.165)
Dwelling and Household Characteristics	Rented (Non-subsidized)		-0.355***	-0.261**	-0.203*	-0.178
			(0.093)	(0.090)	(0.093)	(0.095)
	Owned		-0.711***	-0.356*	-0.270	-0.232
			(0.139)	(0.143)	(0.142)	(0.146)
	Apartment		-0.222	-0.204	-0.136	0.073
			(0.273)	(0.267)	(0.257)	(0.281)
	Semi-Detached		-0.193	-0.183	-0.153	-0.023
			(0.260)	(0.257)	(0.248)	(0.271)
	Single-Detached		-0.154	-0.133	-0.068	-0.047
			(0.241)	(0.237)	(0.230)	(0.246)
	Adequate Housing		-0.381***	-0.339***	-0.295***	-0.231**
			(0.083)	(0.083)	(0.083)	(0.080)
	Suitable Housing		-0.323**	-0.245*	-0.155	-0.061
			(0.103)	(0.097)	(0.094)	(0.092)
	Affordable Housing		-0.072	-0.086	-0.096	-0.078
			(0.088)	(0.091)	(0.090)	(0.094)
	Total After-Tax Income		-0.040	-0.035	-0.057	-0.081*
			(0.053)	(0.061)	(0.049)	(0.038)
	Household Size		-0.003	0.021	0.011	0.009
			(0.052)	(0.056)	(0.053)	(0.054)
	Children		-0.002	-0.035	-0.033	-0.030
			(0.055)	(0.058)	(0.058)	(0.060)
	Youths		-0.088	-0.072	-0.078	-0.035
			(0.055)	(0.059)	(0.061)	(0.062)
	Household Maintainers		-0.048	-0.039	-0.019	0.011
			(0.054)	(0.052)	(0.054)	(0.054)
	Multigenerational Household		0.071	0.096	0.056	0.072
			(0.127)	(0.134)	(0.128)	(0.131)

Table 6.2.1: Child's Use of Indigenous Language at Home, Indigenous Children, 2016 — Part II

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4	Model 5
Primary Household Maintainer Socio-Demographic and Indigenous Characteristics	Age			-0.001	-0.010**	-0.011**
				(0.004)	(0.004)	(0.004)
	Male			-0.081	-0.037	-0.007
				(0.070)	(0.077)	(0.076)
	(Legally) Married			-0.165	-0.247*	-0.276**
				(0.105)	(0.101)	(0.101)
	Common-Law			0.097	0.019	-0.050
				(0.083)	(0.083)	(0.083)
	Separated			-0.099	-0.144	-0.142
				(0.147)	(0.141)	(0.144)
	Divorced or Widowed			-0.527***	-0.571***	-0.559***
				(0.136)	(0.133)	(0.137)
	Inuk (Inuit)			-0.105	-0.821*	-1.164**
				(0.330)	(0.396)	(0.393)
	Métis and Other Indigenous			0.014	0.124	0.096
				(0.187)	(0.202)	(0.202)
	Non-Indigenous			-0.888***	-0.698**	-0.700**
				(0.212)	(0.223)	(0.224)
	Indigenous Citizen			0.327	0.272	0.193
				(0.316)	(0.346)	(0.359)
	Registered			0.252	0.206	0.213
				(0.285)	(0.308)	(0.319)
	Indigenous Mother Tongue				1.266***	1.266***
					(0.182)	(0.182)

Table 6.2.1: Child's Use of Indigenous Language at Home, 2016 — Part III

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4	Model 5
Primary Household Maintainer Human Capital Characteristics	Secondary School				-0.157	-0.117
					(0.097)	(0.098)
	Some Postsecondary				0.087	0.145
					(0.119)	(0.114)
	Trades				0.107	0.052
					(0.102)	(0.101)
	College				0.218	0.258
					(0.206)	(0.205)
	Below Undergraduate				0.426**	0.466**
					(0.152)	(0.148)
	Undergraduate or Above				1.266***	1.163***
					(0.182)	(0.182)
	Unemployed				-0.068	-0.128
					(0.099)	(0.101)
	Employed				-0.220*	-0.215*
					(0.106)	(0.103)
	Part-Time Weeks				0.546*	0.469*
					(0.217)	(0.218)
	Full-Time Weeks				0.396*	0.356
					(0.201)	(0.202)
Primary Household Maintainer Industry of Employment (NAICS)	11-23, Primary				-0.100	-0.154
					(0.226)	(0.230)
	31-33, Manufacturing				-0.504	-0.424
					(0.346)	(0.346)
	41-49, Trade and Transportation				0.391	0.400
					(0.235)	(0.236)
	51-56 Professional Services				-0.149	-0.130
					(0.246)	(0.250)
	61-62 Educational, Health, and Social Services				-0.166	-0.054
					(0.234)	(0.234)
	71-72 Arts, Entertain., Rec., Accomm., Food Services				-0.377	-0.402
					(0.264)	(0.269)
	81 Other Services (Except Public Administration)				-0.227	-0.174
					(0.271)	(0.270)
	91 Public Administration				0.067	-0.005
					(0.232)	(0.229)

Table 6.2.1: Child's Use of Indigenous Language at Home, 2016 — Part IV

Category	Variable / Level	Model 1	Model 2	Model 3	Model 4	Model 5
Geographic Characteristics	Atlantic Provinces					-0.869**
						(0.300)
	British Columbia					-0.381
						(0.208)
	Manitoba					-0.510**
						(0.173)
	Ontario					-0.199
						(0.174)
	Quebec					-0.590*
						(0.288)
	Saskatchewan					0.046
						(0.220)
	Territories					0.961***
						(0.256)
	Semi-Rural					0.076
						(0.231)
	Suburban					0.019
						(0.208)
	Urban					-0.222
						(0.210)
Mobility (1-Year)	Intraprovincial Migrant					-0.338
						(0.337)
	Moved Within Community					-0.292
						(0.335)
	Non-Mover					-0.316
						(0.310)
Mobility (5-Year)	External or Interprovincial Migrant					0.217
						(0.232)
	Intraprovincial Migrant					0.521***
						(0.113)
	Moved Within Community					0.228*
						(0.094)
	Non-Mover					0.115
						(0.090)
	Deviance	78,373.26	76,924.10	75,227.51	72,724.20	70,473.86
	McFadden (Pseudo) R^2	0.148	0.162	0.182	0.210	0.234
	N	407,670	407,670	407,670	407,670	407,670

Note: The sample is restricted to Canadian-born, Indigenous children aged 1 to 18 years that resided outside of a reserve with a primary household maintainer aged 19 years or older. Model 1 includes controls for the child's socio-demographic and Indigenous characteristics. Model 2 adds controls for dwelling and household characteristics. Model 3 adds controls for the primary household maintainer's socio-demographic and Indigenous characteristics. Model 4 adds controls for the primary household maintainer's human capital and labour market characteristics. Model 5 adds controls for geographic characteristics. Survey weights are used for the analysis. Cluster robust standard errors at the census subdivision level are in parentheses.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

Source: *2016 Census of Population* (Statistics Canada 2017b)