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The Determinants of Employment Among Aboriginal Peoples

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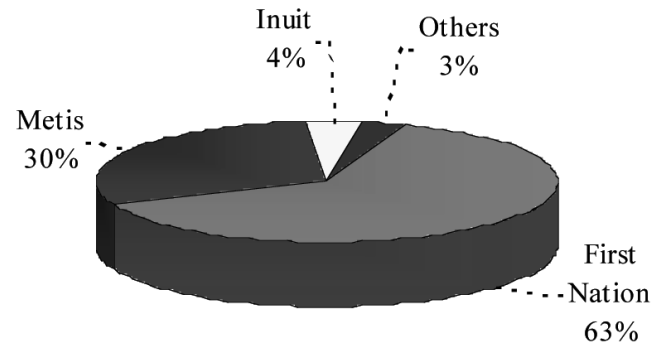
Introduction

The knowledge economy is raising the ante—the basic requirements for securing a good job and a good income have increased. Gaps in education and skills are major reasons underlying the income and job quality polarization of many post-industrial economies. Given the prevalence of low-wage and precarious employment in Canada, the consequences of this pattern of employment are significant and long-term in nature, particularly for Aboriginal Canadians—and other historically disadvantaged groups—who now struggle first to gain access to paid employment and then to climb the earnings ladder. Economic security—and employment in particular—is a central issue for Aboriginal communities across Canada. Employment remains the key source of welfare for the majority of Canadians of all ages—as the source of direct household earnings and the basis of entitlement to key income support programs such as employment insurance and pensions, and other related benefits. Moreover, employment is an important venue of self-development; it can provide a sense of participation in a collective purpose. People also derive enormous benefits from the social networks established through work (Gallie, et al. 1998). As such, securing and sustaining employment is important to numerous social and economic goals.

Yet Aboriginal people experience significant labour market disadvantages compared to other Canadians. In general, they have lower labour force participation and employment rates, higher unemployment levels (Drost and Eryou 1991; Peters and Rosenberg 1995; Mendelson and Battle 1999; Mendelson 2004), lower levels of representation in well-paid employment and consequently, lower average wages and earnings compared to other workers (De Silva 1999; Maxim et al. 2001). Poor employment outcomes are linked to high levels of economic insecurity among Aboriginal peoples, including persistent poverty, which in turn continues to profoundly influence the life chances and aspirations of Aboriginal people, their families and their communities (Brunnen 2003). The gap in employment outcomes poses a formidable challenge for both Aboriginal people and all levels of government in Canada. Understanding what factors influence labour market outcomes is important in identifying relevant programs and policies that facilitate access to meaningful, well-paid employment and the benefits that flow from employment for Aboriginal peoples.

Figure 1.1: Working-age Population by Aboriginal Status, Canada 2001



N = 417,725

Note: Category "others" includes people who declared multiple Aboriginal identities and those who declared themselves as Registered Indian and/or Band members without Aboriginal identites response.

Source: CCSD calculations based on 2001 Census Public Use Microdata Files

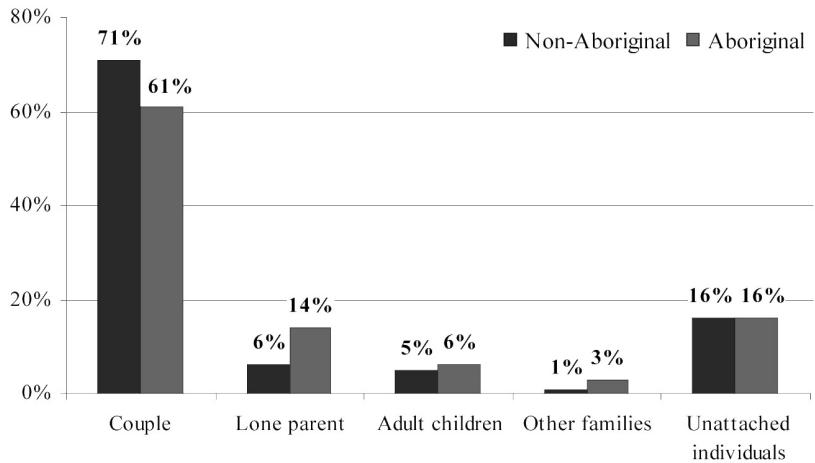
Demographic Profile of Aboriginal Peoples

The following is an overview of demographic and economic realities of Aboriginal peoples in Canada. It describes persistent disparities in the circumstances of Aboriginal peoples that set the context for the following analysis of employment and discussion of program and policy:

1. The Aboriginal population is growing. In 2001, there were nearly one million Aboriginal people living in Canada, an increase of over 20% from 1996. In the same period, there was an even larger increase in the numbers of working-age Aboriginal peoples, aged 25 to 64 years. In 1996, 335,450 individuals identified as Aboriginal; in 2001, 417,725 claimed Aboriginal ancestry.[1] The growth in the Aboriginal population is one of the most significant demographic trends in Canada today, and most decidedly, an important consideration in the development of future employment policies and programs.

2. There has been significant growth among the Métis and Inuit populations. According to the 2001 Census, over six in 10 Aboriginal peoples (62.3%) identified as North American Indian,[2] while three in ten (30.0%) identified as Métis, and one in twenty (4.4%) indicated that they were Inuit as shown in **Figure 1.1**.[3] Between 1996 and 2001, the percentage of North American Indians dropped slightly (-1.9%) while the proportion of Métis grew slightly (1.7%). The share of the Inuit population was stable over this five year period (0.2% change). However, as noted above, the overall

Figure 1.2: Working-age Population by Household Type and Aboriginal Status, Canada 2001



Source: CCSD calculations based on 2001 Census Public Use Microdata Files

numbers of each group grew between 1996 and 2001, most notably among the Métis (32.1%) and the Inuit (29.9%). Over half of Aboriginal people aged 25 to 64 years (57%) reported that they were registered Indians under the *Indian Act*; 56% indicated that they were members of an Indian Band or First Nation.

3. The age profile of this group among Aboriginal people is quite distinct from the non-Aboriginal population. Aboriginal peoples tend to be younger than non-Aboriginal peoples. Indeed, the Aboriginal population is growing at a much faster rate than the total population—a trend noted above.[4] As a result, a large number of Aboriginal young adults will be entering the labour market over the next ten years, particularly in Western Canada. In 2000, over one-third of working-age Aboriginal people were between 25 and 34 years old compared to one quarter of their non-Aboriginal counterparts. By contrast, 55 to 64 year olds made up only 12% of the working-age Aboriginal population compared to 17% among non-Aboriginals. The Inuit have the youngest working-age population compared to First Nations peoples and the Métis.

4. The Aboriginal population has comparatively high rates of mobility (Norris and Clatworthy 2003). In the year before the 2001 Census, 21% of Aboriginal working-age people had moved whereas this was the case among only 13% of non-Aboriginal respondents. However, in his analysis of 2001 Census data, Michael Mendelson points out that there has not been a "massive migration off the reserves and into the cities" (Mendelson 2004, 7).

Rather, the proportion of Aboriginal people living on-reserve and in other rural and urban areas has stayed roughly the same as the number of Aboriginal people has grown. Aboriginal peoples are moving back and forth between reserves and other communities. This is an important point to keep in mind in the design of employment programs.

5. There are slightly more women of working age within the Aboriginal population than the non-Aboriginal population. This is an important factor to take into account in order to understand the employment dynamics within the Aboriginal community, given the historic position of women vis-à-vis the paid labour market, and the share of caring responsibilities that women continue to shoulder.
6. The proportion of lone-parent households is higher for Aboriginal working-age adults for among non-Aboriginal working age adults (see **Figure 1.2** – page 5). The proportion of Aboriginal lone-parent families headed by women is more than twice that among the non-Aboriginal population.[5] Inuit peoples are more slightly more likely to live in couple families (in which a member of either a married or common-law couple is the economic family reference person) and somewhat less likely to be unattached individuals compared to First Nations people and the Métis. Approximately one in seven First Nations, Métis, and Inuit families are headed by a lone parent compared to one in 17 non-Aboriginal families.
7. Aboriginal people commit more hours per week to household and caring tasks than do non-Aboriginal Canadians. For example, in 2001, 25% of working-age Aboriginal respondents spent more than 30 hours per week involved in housework, compared to 16% of non-Aboriginal respondents. The percentage of Aboriginal women working more than 30 hours a week on household tasks was higher than the percentage of Aboriginal men (33% compared to 16%). Even so, Aboriginal men were twice as likely as non-Aboriginal men to be in this group.[6] Similarly, Aboriginal people were almost twice as likely as non-Aboriginals to report that they spent more than 30 hours per week caring for children (28% compared to 16%). And again, this was true for both Aboriginal men and women. By contrast, over half of the non-Aboriginal working-age population (53%) reported that they did not spend any time caring for children, compared to 43% of the Aboriginal population. This may be linked to the higher birth rate, as noted, as well as the higher proportion of lone-parent families within the Aboriginal community. Working-age adults in the Aboriginal community are more likely to provide more than 10 hours per week of elder care, but the difference with the non-Aboriginal population is not large.
8. Aboriginal young people will be more highly educated than any previous group in the past. Between 1996 and 2001, the education profile of Aboriginal peoples improved noticeably (Statistics Canada 2003a). Nonetheless,

there remains a significant gap in educational attainment between Aboriginal and non-Aboriginal people. Almost half of Aboriginal people aged 25 to 64 do not have an educational degree, certificate, or diploma compared to one-quarter of the non-Aboriginal population aged 25 to 64 years. There are gaps as well in the proportion of Aboriginal and non-Aboriginals who hold a high-school diploma, a trade certificate, or a college degree, and especially those who hold university degrees. Non-Aboriginals are more than twice as likely to have completed university. Despite notable progress, the education gap has been slow to narrow—in part because non-Aboriginals have been increasing their levels of educational attainment as well. The emphasis in policy on attaining educational qualifications is an important one though. Generally, those with a trade certificate have substantially improved employment and income characteristics compared to those without a certificate. Indeed, there is some evidence that certification is of greater importance to Aboriginal peoples than to others (Indian and Northern Affairs Canada 2005). By and large, Inuit people have the greatest educational challenges. Fewer Inuit people hold educational degrees than the Métis or First Nations peoples. The Métis are most likely to hold an educational degree or diploma.

9. The proportion of Aboriginal people who are full-time students is notably larger than among non-Aboriginals,[7] while the proportion of part-time students is the same. Greater numbers of students is certainly one factor behind the lower rates of employment among Aboriginal peoples.

10. The average income of non-Aboriginals was 1.5 times higher than the average income of Aboriginal people. In 2000, the average total income of Aboriginal peoples was $22,190, while the average among non-Aboriginals was much higher at $34,140. Aboriginal people have been making some economic progress, but compared to the growth in labour market participation, the gap in income between Aboriginals and non-Aboriginals is cause for concern. Between 1995 and 2000, the average total income increased by $2,980 (constant dollars). But the income gap only narrowed slightly as average income among non-Aboriginals improved at the same time.[8] The discrepancies between average Aboriginal and average non-Aboriginal wages and salaries are even greater. The average wage and salaries of the non-Aboriginal working population was almost two times higher than that of the Aboriginal population in both 1995 and 2000. In 1995, the average salary of Aboriginal people reporting employment income was $13,780 (constant dollars), compared to an average of $24,210 (constant dollars) for the non-Aboriginal working-age population. In 2000, average salaries had increased among Aboriginal people but they were still significantly lower than their non-Aboriginal counterparts ($16,890 and $27,600, respectively). In 2000, one-third of Aboriginal people aged 25 to 64 years (33.0%) did not have any employment income, compared to roughly one

quarter of non-Aboriginals (23.9%). The proportion of Aboriginals in this group, however, fell between 1995 and 2000 (as it did among non-Aboriginals as well). Lastly, average government transfer received by the Aboriginal population is almost two times greater than that received by the non-Aboriginal population. There was a decrease, however, between 1995 and 2000 in the average amount received by Aboriginal people in receipt of transfers ($4,210 (2000 dollars) in 1995 compared to $3,720 in 2000).

This portrait highlights a number of facts important to the following discussion of employment. Chief among them is the fact that the Aboriginal population in Canada is growing, a result of both higher rates of fertility and the fact that more individuals are identifying as Aboriginal. The Aboriginal population is younger than the non-Aboriginal population and over time will make up an increasing percentage of Canada's labour force, particularly in the west. Over half of Aboriginal people live in urban areas and 80% of working-age Aboriginal people do so. The proportion of Aboriginals living on reserve stayed roughly the same between 1996 and 2001 in the face of population growth and comparatively high rates of mobility. The education gap remains significant. Almost half of Aboriginal people have less than a high school education, while twice as many non-Aboriginals (when compared to Aboriginals) are university graduates. Improvements in educational attainment notwithstanding, little progress has been made reducing the income disparities between Aboriginal peoples and non-Aboriginals: In 2000, average total incomes of non-Aboriginals were one-and-a-half times higher than the total incomes of Aboriginal peoples, and average earnings and wages were two times higher.

Goals and Guiding Questions

There is a significant body of existing research on the socio-economic status of Aboriginal peoples in Canada. There are basic demographic profiles of the Aboriginal population which provide important information on a range of subjects relevant to the study of determinants of employment (Conference Board of Canada 2003; Statistics Canada 2003; Mendelson and Battle 1999; Mendelson 2004). Other studies have attempted to explore the factors associated with wage inequalities (Banerjee et al. 1991; George and Kuhn 1994; Pendakur et al. 1998, 2002; De Silva 1999; Maxim et al. 2001). These studies have identified low levels of educational attainment; a comparatively young population; the location/residence of many Aboriginal people in remote communities and on reserves; lack of training and of language proficiency; gender; and discrimination in the labour market as key factors behind poor labour market outcomes, specifically low wages, among Aboriginal peoples (See Clatworthy et al. 1995; Drost 1995; George et al. 1995; RCAP 1996a; Hull 2000). To date, however, very little work has been completed examining the determinants of Aboriginal employment in Canada.[9]

The broad goal of this research project is to explore the determinants of employment among Aboriginal people living in Canada, using 2001 Census data, and to discuss the policy implications of these findings for improving employment prospects for Aboriginal people.[10] Specifically, this project will identify and examine the key factors associated with employment, and compare and contrast the major determinants of employment for Aboriginal Canadians and non-Aboriginal Canadians. In addition, the project will look at the likelihood of Aboriginal people—here including First Nations, Métis, and Inuit—to hold full-time jobs and employment that matches their education and skills.

The following questions will guide the study:

1. What is the current employment situation of Aboriginal people? Is it the same for the different groups (First Nations, Métis, and Inuit)? How does their employment standing compare and contrast with the situation of non-Aboriginal Canadians?

2. What is the probability of Aboriginal people being employed? Is the probability the same for the different Aboriginal groups (First Nations, Métis and Inuit)? What is the probability of holding employment that matches one's level of education?
3. What are the reasons behind the poorer employment outcomes among Aboriginal peoples compared to non-Aboriginal peoples?

4. What key issues need to be taken into consideration in the design of policies and programs to improve the labour market outcomes for Aboriginal peoples?

Methodology

Data

The major goal of this study is to identify the factors related to the probability of employment and participation in the labour force for Aboriginal people, and how these factors are similar to or different from those of non-Aboriginal people. To answer these questions, this study used the individuals file of the 2001 Census Public Use Microdata Files (PUMF). The PUMF are based on a 2.7% sample of unaggregated, anonymous records from the 2001 Census database. The individuals file contains 138 variables, and provides data on the characteristics of the population such as demographic information, education history of indivi duals, labour market activity, and income levels. Data are provided for Canada as a whole, provinces and territories, and for 19 selected Census Metropolitan Areas (CMAs).

The PUMF have several limitations that will impact the study. For instance, these files do not include variables such as work experience, training, or hourly

wage. In addition, some information is aggregated. For example, the variable "years of schooling" is not continuous but aggregated. Moreover, data are only data available for 19 of 27 CMAs. With regard to Aboriginal peoples, the PUMF do not include a flag to differentiate between those living on-reserve and off-reserve, despite the fact that this information was gathered in the Census. As well, under-coverage in the Census was higher among Aboriginal people than other segments of population. Enumeration was not permitted or was interrupted before it could be completed on 30 Indian reserves and settlements. As a result, 30,000 to 35,000 people living on reserves and in settlements were incompletely enumerated. This incomplete enumeration has the greatest impact with respect to data on North American Indians, and for persons registered under the *Indian Act* (Statistics Canada 2003b). However, in spite of some shortcomings, the Census remains the most comprehensive source of information on various socio-economic, demographic, and labour market characteristics of Canada's Aboriginal population.

The following definitions have been used to identify Aboriginal peoples in the 2001 Census of Canada and will be used in this study.

- **Aboriginal Identity** refers to those persons who reported identifying with at least one Aboriginal identity group, e.g., North American Indian, Métis or Inuit, and/or those who reported being a Treaty Indian or a Registered Indian as defined by the *Indian Act of Canada*, and/or those who were members of an Indian Band or First Nation. As well, those who report multiple Aboriginal identities are included.[11]
- **Non-Aboriginal** refers to all those who did not respond in the positive to the Aboriginal question. For the purposes of this study, we have excluded immigrants, non-permanent residents and non-Aboriginal individuals who identify as members of a visible minority. This was done in order to remove the potential effect of the presence of other historically disadvantaged groups such as new immigrants and visible minorities in the non-Aboriginal category on our comparative analysis.
- **Working-age Population** includes all those aged 25–64 years in the labour force. We have chosen this age group in order to base the analysis on the working-age population, and avoid confounding the effects of transition from school to work for the younger age groups, and from work to retirement for the older age groups.

Data Analysis

Our primary objective is to estimate the effects of several determinants on the probability of accessing the labour market (having a job), of accessing a good job (having a full-time job), and of accessing an appropriate job for one's level of education and skill. Specifically, logistic regression analysis will be used to determine the influence of various factors on Aboriginal people's probability of:

- Being employed (dependent variable no. 1);
- Being employed full time, that is being employed for at least 30 hours per week[12] (dependent variable no. 2); and
- Occupying a job that matches one's skill level (dependent variable no. 3).

The third dependent variable is based on the 2001 National Occupational Classification (NOC) that includes skill/education characteristics for each occupation. As such, it is possible to determine if the individual occupies a job that corresponds to his/her level of skill/education.

Three different logistic regression models are presented below, one for each research question. Each model explores the determinants of employment for three working-age population groups: the total working-age population, the Aboriginal working-age population, and the non-Aboriginal working-age population. We have devised this methodology in order to test for the effect of two main independent variables—Aboriginal status and Aboriginal identity group (First Nations, Métis, Inuit)—controlling for the effect of known individual-level predictors of employment. These include demographic factors (e.g., gender, age, and family status), educational attainment (e.g., highest degree attained, and student status), and mobility. We also look at whether or not an individual lives within a Census Metropolitan Area (CMA). There are a host of other structural factors that come into play in an individual's decision to seek out employment, such as the presence of support networks, the vitality of local economies, and systemic discrimination. However, given the limits of existing data sets and quantitative methodologies, the paper concentrates on human capital variables.

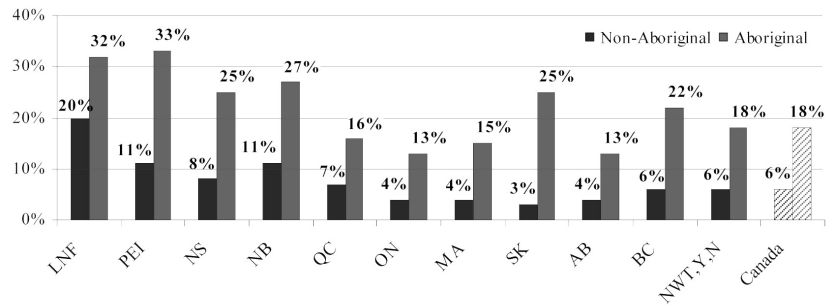
Results—Descriptives

Being Employed

In 2001, there were large discrepancies in the labour market experiences of Aboriginal and non-Aboriginal working-age people, despite overall employment gains between 1996 and 2001. In 1996, just over half of Aboriginal people (53%) were employed in the paid labour market.[13] By 2001, the proportion of the Aboriginal working-age population engaged in the paid-labour market had climbed five percentage points, reflecting in part improved economic conditions through the last half of the 1990s. The gap in employment rates between Aboriginals and non-Aboriginals narrowed slightly over this period, but remained significant. In 2001, over three quarters of non-Aboriginals were employed, a difference of 18 percentage points over Aboriginals.

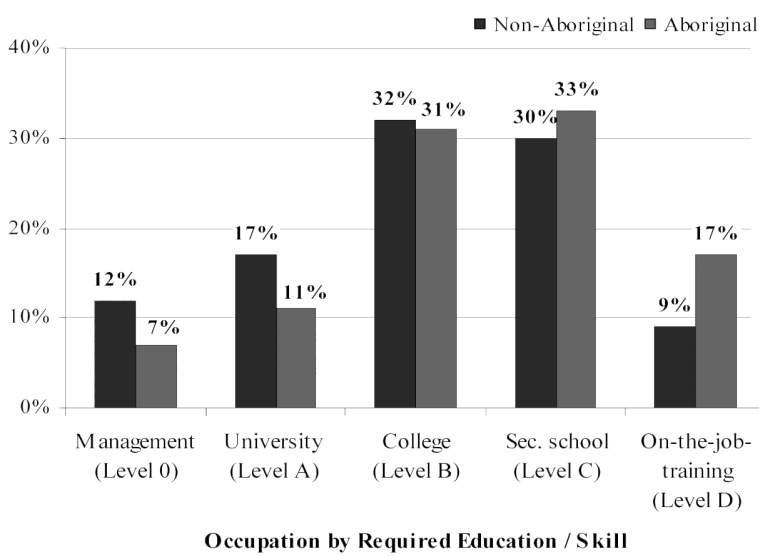
Men were more likely to be employed than women, although the gap in employment is slightly narrower among Aboriginal men and women. In 2001, 62% of Aboriginal men were engaged in the paid-labour market compared to 54% of Aboriginal women. Among non-Aboriginals, the respective employment rates were 82% and 71%.

Figure 1.3: Unemployment Rates of Working-age Population by Aboriginal Status, Provinces and territories, 2001



Source: CCSD calculations based on 2001 Census Public Use Microdata Files

Figure 1.4: Working-age Population by Occupation by Required Level of Education and Aboriginal Status, Canada, 2001



Source: CCSD calculations based on 2001 Census Public Use Microdata Files

Within the Aboriginal population, the Métis had a higher rate of employment in 2001 than the Inuit or First Nations : 67.8% compared to 63.1% and 53.2% respectively. However, the Inuit working-age population experienced the largest increase in employment between 1996 and 2001, almost ten percentage points. The employment rate among the Métis increased by approximately eight percentage points, while the employment rate among First Nations people increased by a modest three percentage points.

Aboriginal people also experienced higher rates of unemployment compared to non-Aboriginal people.[14] In 2001, Aboriginal people were three times more likely to be unemployed than non-Aboriginals: 17.5% of working-age Aboriginal adults compared to 5.6% of non-Aboriginals. Again, there was improvement from 1996 when 22.3% of working-age Aboriginal adults were unemployed. However, this gap remains a significant barrier to economic security among Aboriginal people.

The discrepancies in the rate of unemployment by province and territory are even more pronounced (**Figure 1.3**). The highest rates of unemployment are found in Eastern Canada, particularly among Aboriginal peoples. Yet the discrepancies are large in the West—particularly Saskatchewan and British Columbia—where large numbers of Aboriginal people live.

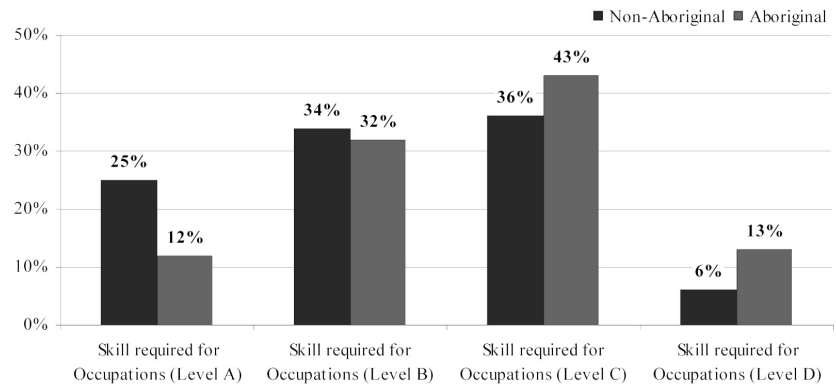
Over one in five First Nations people were unemployed in both 1996 and 2001. The Métis experienced the largest decrease in unemployment over this period, falling from 18.8% in 1996 to 12.4% in 2001. The rate of unemployment among the Inuit in 2001 was 16%. These data show that the labour market challenges facing Aboriginal people do not stem from an unwillingness to participate in the labour market, but rather from a lack of success in securing and retaining employment. This raises important questions about the reasons behind such high levels of unemployment.

The proportion of Aboriginal people aged 25 to 64 years "not in the labour force" (NILF) is notably higher than among non-Aboriginal people. In 2001, 124,110 Aboriginal persons (or 29.7%) were in this situation, compared to only 19.2% of non-Aboriginal people. People not in the labour force may include students, homemakers, retired workers, seasonal workers in an "off" season who were not looking for work at the time of the Census, and persons who could not work because of a long-term illness or disability. Over one third of working-age Aboriginal women (36%) and almost one quarter of Aboriginal men (23%) were "not in the labour force" in 2001 compared to 25% of non-Aboriginal women and 13% of non-Aboriginal men.

Having a Full-Time Job

In 2001, among Aboriginal and non-Aboriginal working-age people employed in the week prior to the Census, for whom we have complete information, the likelihood of having a full-time job was roughly the same. Both groups experienced an increase in the proportion of workers engaged in full-time employment between

Figure 1.5: Working age Population by Education and Skill required by main Occupation, by Aboriginal Status, Canada, 2001



Source: CCSD calculations based on 2001 Census Public Use Microdata Files

1996 and 2001, and conversely, a decrease in the proportion of workers employed on a part-time basis. The proportion of Inuit working full-time is slightly lower than among First Nations people and Métis, 81% compared to 85% and 86% respectively. Overall, Aboriginal workers represented 2.5% of the full-time working population, and 2.9% of the part-time working population.

Having an "Appropriate" Job

Economic well-being does not exclusively hinge on having a job. The quality of employment is clearly important, particularly in the Canadian labour market that is characterized by a pool of low-wage, precarious employment (Jackson 2005).

Figure 1.4 (page 12) presents the distribution of occupations held by Aboriginals and non-Aboriginals aged 25 to 64 years, organized by the level of education and skill deemed necessary to access each occupation. The occupation skill levels in this figure refer to the highest level of education and/or training required for each occupational group. It is based on the National Occupational Classification (2001).[15] As we see, Aboriginal people are more likely to hold medium-skilled and low-skilled occupations, that is, occupations for which college education, high-school, or on-the-job-training are required. For instance, they are over-represented in occupations that are characterized by the on-the-job-training compared to the experience of non-Aboriginals. And they are under represented in managerial occupations or occupations for which a university degree is needed, compared to non-Aboriginals.

Figure 1.5[16] looks at the distribution of education and skill among Aboriginal and non-Aboriginal people. Non-Aboriginals are more than twice as likely to have the education and skills required for Level A occupations—those that require a university degree. By contrast, Aboriginal people are more likely to have the education and skills

Table 1.1: Occupation / Skill Match Summary

	Total	Non-Aboriginal	Aboriginal
Qualified for the job	4,366,925	48%	42%
Overqualified for the job	2,943,405	32%	35%
Overqualified – by 1 level	2,257,485	25%	27%
Overqualified – by 2 levels	628,475	7%	7%
Overqualified – by 3 levels	57,450	1%	1%
Underqualified for the job	1,876,695	20%	24%
Underqualified – by 1 level	1,660,270	18%	19%
Underqualified – by 2 levels	213,095	2%	4%
Underqualified – by 3 levels	3,330	0%	0%
Sub-Total	9,187,025	100%	100%
Those in managerial occupations	1,208,160	12%	7%
Total	10395,185		

Source: CCSD calculations based on 2001 Census Public Use Microdata Files

required for Level C and Level D occupations. Indeed, they are more than twice as likely compared to non-Aboriginals to have the skills required for Level D occupations—that is less than eight years of schooling and no formal employment training. Overall, as shown in **Table 1.1**, we see that roughly four out of ten Aboriginal people (42%) hold a job commensurate with their skills and training compared to just under half of non-Aboriginals (48%). One quarter (24%) hold jobs for which they do not technically have the qualifications required, and 35% hold jobs for which they are overqualified. The respective figures for non-Aboriginals are 20% and 32%. Generally speaking, there is not a large gap between the experience of Aboriginal people and non-Aboriginals in this regard. Roughly one third of working-age adults in Canada are formally overqualified for the jobs that they hold. This speaks to the stock of employment that is currently available in Canada; underemployment is a significant problem.

However, there remain significant challenges for Aboriginal people when we probe these data further. **Table 1.2** (page 16) presents a more detailed breakdown of our findings. It shows that even when Aboriginal people acquire higher levels of education, they are still more likely than non-Aboriginals to be employed in a job that does not match their skill set. This is true for Aboriginal people with the credentials and training for Level A, Level B, and Level C occupations. By contrast, Aboriginal people with low levels of education (skills required for Level D occupations) are more likely than non-Aboriginals to have a job that matches their skill set. This is not surprising given the comparatively larger number of Aboriginal people with low levels of education (individuals with less than eight years of schooling). But again, we see that this group of Aboriginal people is

Table 1.2: Occupation / Skill Match among Working-age Population, by Aboriginal Status, Canada, 2001

	Skill required for occupations (Level A)	Skill required for occupations (Level B)	Skill required for occupations (Level C)	Skill required for occupations (Level D)
	Non-Aboriginal			
Good skill set match	56%	47%	45%	25%
Bad skill set match	44%	53%	55%	75%
	Aboriginal			
Good skill set match	47%	42%	41%	32%
Bad skill set match	53%	58%	59%	68%

Source: CCSD calculations based on 2001 Census Public Use Microdata Files

generally less likely to hold occupations that require higher levels of education compared to non-Aboriginals. This table highlights clearly the education and training gap that continues to delimit the employment and income prospects of Aboriginal people at present—and potentially in the future.

Results—Logistic Regression

The previous section paints a picture of the employment gap between Aboriginal and non-Aboriginal Canadians. What then are some of the potential reasons behind these persistent disparities in the employment prospects of Aboriginal people? And what are their policy implications?

We know from available evidence that Aboriginal people have lower rates of employment and higher rates of unemployment compared to non-Aboriginal people. The following analysis shows that they have a lower likelihood or lower odds of being employed as well. Indeed, Aboriginal people aged 25 to 64 years are 43% as likely to be employed, according to findings from the 2001 Census. Aboriginal identity does have an impact on the likelihood of employment. While all Aboriginal people are less likely to be employed than non-Aboriginals, people who identify as Inuit are slightly more likely to be employed than Métis people who are more likely to be employed than First Nations people after controlling for socio-demographic factors.

Looking at both the Aboriginal and non-Aboriginal populations, we find that several factors are influential in predicting the likelihood of employment, in addition to Aboriginal identity. Moreover, the factors that positively and negatively influence the likelihood of employment are the same for Aboriginal people and non-Aboriginals.[17]

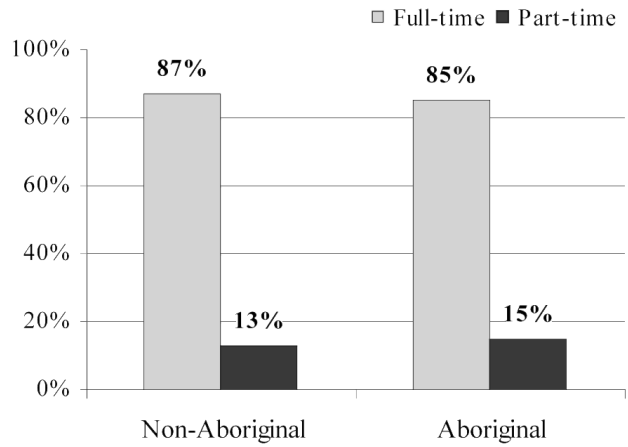
Educational attainment is the key determinant of employment for Aboriginal people (see Drost and Eryou 1991; Drost 1995; White et al. 2003). Controlling for other known predictors of employment, including Aboriginal status, the impact of education on employment is clear. Aboriginal university graduates, for example, are five times more likely to be employed than Aboriginal people without an educational degree or diploma. With each higher degree earned, the likelihood of employment increases significantly. Education is also important for non-Aboriginals but to a lesser degree. Certainly, non-Aboriginal university graduates are three and a half times more likely to be employed than those without any formal education qualifications, but the impact is less pronounced. Our findings clearly show that the rate of return of higher levels of education is higher for Aboriginal people.

Our findings also confirm that men are more likely to be employed than women, but gender appears to have a larger impact on the likelihood of employment among non-Aboriginals. Among non-Aboriginals aged 25 to 64 years, men are twice as likely to be employed than women. The gap between Aboriginal women and Aboriginal men is slightly narrower. Aboriginal women are 69% as likely as Aboriginal men to be employed, holding other factors such as age and family status (being a lone parent or an unattached individual) constant. This is not to say that Aboriginal women are more likely to be employed than non-Aboriginal women as we note above, but that the gender gap in employment is slightly narrower within the Aboriginal community.

Being a lone parent is also linked to lower rates of employment when compared to those living in families, controlling for factors such as education and Aboriginal identity. However this trend is much less pronounced among non-Aboriginals—an interesting finding. While non-Aboriginal women are 48% as likely to be employed as non-Aboriginal men, non-Aboriginal lone parents are 89% as likely as those who are not lone parents to be employed. This suggests that there are other factors that reduce the likelihood of women being employed compared to men. By contrast, the odds of employment among Aboriginal women and among Aboriginal lone parents are virtually the same at 0.69 and 0.70 respectively.

In their comparative study of Aboriginal and non-Aboriginal women, White et al. find that lone parents are less likely to be employed than those who are married or living alone. Moreover, the presence of young children has an important influence on the likelihood of employment: In 1996, among all Canadian women, about 61% of those with no children under 15 years, and one or more 15 years and older, were employed, compared with only 45% of those with one or more children under two years and none under five years (White et al. 2003, 399, 402). However, among Registered Indians, the impact of having small children appears to be less compared to other Aboriginal women and non-Aboriginal women. They suggest that there might be "a special set of circumstances operating in First Nations communities, such as the extended family network that somehow

Figure 1.6: Proportion of Full-time/Part-time Workers by Aboriginal Status, Canada 2001



Source: CCSD calculations based on 2001 Census Public Use Microdata Files

moderates the negative effects of minor children on labour force participation in such communities" (*ibid*., 406). The question of lone parent status bears further exploration.

Migration within the last year is also linked with decreased odds of employment. Whereas one might have expected individuals that have recently moved to have higher rates of employment, this does not appear to be the case. Migration within the last year negatively influences the prospect of employment (compared to those who did not move). The impact is slightly greater among Aboriginal peoples than non-Aboriginals. This is important to keep in mind given the high rate of mobility within the Aboriginal population.

Other factors are linked with a higher likelihood of employment, including age, working part-time, and living in an urban area. For both Aboriginal people and non-Aboriginals, the relationship between age and the likelihood of employment is curvilinear: The likelihood of employment tends to increase with age overall. However, the rate of increase begins to diminish among older individuals, and at some point, (as individuals near retirement), increased age actually begins to decrease the likelihood of employment. In our study, for all models, we find that years of age increase the odds of employment. At younger ages, the impact of the decay term is small; however, at older ages the impact of the decay term becomes quite noticeable—for both Aboriginal peoples and non-Aboriginals. However, increased age has a greater positive impact on the likelihood of employment among non-Aboriginals (looking at the impact of age alone).[18]

Part-time students also have a higher likelihood of being employed compared to non-students.[19] And, living in a Census Metropolitan Area (a proxy for an urban centre) is linked to higher rates of employment, slightly more so among Aboriginal peoples than non-Aboriginals (1.40 compared to 1.26) after holding our

co-variates constant. This finding, at least in part, reflects the higher rate of employment growth in urban centres over this period compared to non CMAs (Heisz et al. 2005).

What is the impact of Aboriginal status on the likelihood of employment after taking other socio-demographic factors into account? Succinctly stated, Aboriginal status matters. Aboriginal identity remains an important determinant of employment. Factors such as comparatively low levels of education clearly account for some of the difference in the employment prospects of Aboriginals and non-Aboriginals. Yet, holding constant the co-variates in our model, Aboriginal people as a group are still 48% as likely to be employed as non-Aboriginal people. Looking specifically at each group, First Nations people are 41% as likely to be employed, the Inuit are 64% as likely to be employed, and the Métis are 71% as likely to be employed compared to non-Aboriginals after controlling for the effects of a number of socio-demographic factors.[20] This does not mean that education is not important, as we have argued above. Education is key to improving employment prospects, particularly for Aboriginal people. But, the disproportionately large population of Aboriginal people with low levels of education continues to influence the overall likelihood of employment. Certainly, there are other factors that influence the likelihood of employment, factors that have not been included in our model. For instance, the health status of workers has emerged as an important determinant of employment in the Australian literature. We also know that having a disability reduces the likelihood of being employed and Aboriginal persons have a much higher rate of disability than non-Aboriginals. Local economic conditions such as the stock of employment opportunities, and level of unemployment are important to consider. And finally, other structural issues such as culture and discrimination may well influence employment outcomes. Certainly, the need to look for explanations apart from variations in individual characteristics is revealed in the size of the gap in employment opportunities reported here.

What factors influence the likelihood of being employed full-time among Aboriginal people? Are the odds of full-time employment the same for Aboriginal people and non-Aboriginals? **Figure 1.6** shows that that proportion of full-time and part-time workers among Aboriginal and non-Aboriginal workers is roughly similar. However, overall, Aboriginal people are 50% less likely to be employed on a full-time basis than non-Aboriginals—that is, they have a smaller chance of securing full-time employment. This is true for First Nations people, the Métis and Inuit. The odds of full-time employment, however, are higher among the Métis and Inuit compared to First Nations people (1.64 and 1.27 times higher respectively). This holds true when we hold constant factors such as education, age, and gender as well.

What factors influence full-time employment among Aboriginal people? The same factors that influence access to employment appear to influence access to full-time employment. As the level of education increases, the odds of being employed full-time increase as well. Individuals without any educational credentials are

Table 1.3: Likelihood of Employment among Aboriginal People compared to Non-Aboriginal People, Canada, 2001

	Likelihood of being employed				Likelihood of being employed full-time			
	FN	Métis	Inuit	Total	FN	Métis	Inuit	Total
Impact of Aboriginal identity alone	0.35	0.66	0.53	0.43	0.43	0.70	0.55	0.50
Impact of Aboriginal identity taking other social and demographic factors into account	0.41	0.71	0.64	0.48	0.48	0.74	0.64	0.56
Difference	0.06	0.05	0.11	0.05	0.05	0.04	0.09	0.06

hugely disadvantaged compared to those with higher levels of education, particularly university graduates. The gap in employment prospects among Aboriginal peoples between those with an educational credential and those without is very pronounced. Again, the returns of education as measured by access to full-time employment are higher among Aboriginal peoples than non-Aboriginals.

Being at school full-time decreases the likelihood of having full-time employment (as it decreases the likelihood of being employed). Being a part-time student is not a significant predictor of full-time employment among Aboriginal people aged 25 to 64 years.

Women are much less likely than men to be employed full time. This is not surprising as women tend to have higher rates of part-time employment. And we see that Aboriginal women are less likely to be employed full-time than to be employed on either a full-time or part-time basis (54% as likely to be employed full-time compared to 69% as likely to be employed compared to men). However, again, there is a significant difference in the likelihood of full-time employment between Aboriginal and non-Aboriginal women. Aboriginal women are 1.5 times more likely than non-Aboriginal women to be employed full time.

Aboriginal lone parents—the majority of whom are women—are less likely to be employed than non-lone parents as one might expect, but not to a large degree. Indeed, the odds of full-time employment among Aboriginal lone parents are generally greater than the odds of employment (0.84 compared to 0.70). And among non-Aboriginals, lone parents are more likely to be employed full-time than non-lone parents—an interesting point to explore further.

Living in a Census Metropolitan Area is also linked to higher odds of full-time employment for both Aboriginals and non-Aboriginals, more so among Aboriginals. And as working-age adults age, their full-time employment prospects improve.

What is the impact of Aboriginal status on the likelihood of full-time employment after taking factors such as education and place of residence into account? The impact of Aboriginal status is still an important determinant of full-time employment even after controlling for a number of other factors (See **Table 1.3**). While the overall likelihood of full-time employment is higher than the likelihood of employment (full-time and part-time), a significant difference remains compared with the non-Aboriginal population, particularly for First Nations people. Again, these findings point to the impact of other individual and structural factors in explaining the differential in employment opportunities between Aboriginal and non-Aboriginal people.

What factors influence the likelihood of being employed in a job that matches one's level of education among Aboriginal people? Are the odds of holding an appropriate job where there is a match between skills and employment the same for Aboriginal people and non-Aboriginals? The likelihood of having a job where skill and job content match is lower among Aboriginal peoples compared to non-Aboriginal people. However, the difference is smaller than the difference in the odds of holding a job or holding a full-time job. Aboriginal people are 27% less likely than non-Aboriginals to hold "appropriate" employment, and 20% less likely after holding constant level of education, gender, place of residence, etc. Stated another way, the odds of a person getting a job that matches his or her skill set—regardless of level of education—is slightly better than the odds of securing employment in the first place.

Again, Métis people have a greater chance of obtaining employment that corresponds with their skills than First Nations people. However, the odds of an Inuit person having a "job/education match" are lower than that of First Nations people.

What factors influence the likelihood of securing employment that corresponds to an individual's education and training? The same types of factors influence the likelihood of having a "job/education match" among Aboriginal peoples and non-Aboriginals. However, there are notable differences. For example, education is predictably an important determinant of the education/job match, after controlling for a variety of other factors. Aboriginal university graduates are three times as likely as those without any educational qualifications to have a job/education match, indeed, they are more likely to have a job/education match than non-Aboriginals. However, the odds of securing a job that matches one's education are lower for college degree holders than for trade school graduates, for both Aboriginals and non-Aboriginals. Indeed among Aboriginal peoples, the value of a college degree and high school diploma is effectively the same with respect

to enhancing one's odds of securing an "appropriate" job. This raises important questions about the job market for college degree holders. It may also reflect the relatively high numbers of Aboriginal people in trade school and the sectors of the economy within which they work.

Men are more likely to hold "appropriate" employment compared to women, however, among Aboriginal women, the gap is less than the gender gap in employment prospects (0.77 compared to 0.69). Indeed, while non-Aboriginal women were 33% as likely to be employed full-time compared to non-Aboriginal men, they are 82% as likely to be employed in jobs that correspond to their education and training. There is not a large difference in this regard between Aboriginal and non-Aboriginal women. However, it is worth noting that non-Aboriginal women have better odds than Aboriginal women in contrast to our findings for question 1 and question 2 (page 9). Again, this is not an indicator of access to "good employment" per se; rather, women, regardless of education, have a good—although not equal—chance of obtaining a job that matches their skills. The odds of having a job/skill match are lower for lone parents (compared to non-lone parents) and for unattached individuals (compared to those in economic families). However, the gaps are not large.

While urban living or a recent move appears to have little influence (indeed, the differences are not significant among Aboriginal peoples), additional years of age do affect the likelihood of securing appropriate employment somewhat.

Aboriginal people are less likely to be employed, are more likely to be unemployed, and more likely to be outside of the labour force all together compared to non-Aboriginals. Aboriginals are somewhat more likely to be under-qualified and overqualified for their jobs. Statistical analysis confirms that lower educational attainment is a significant factor underlying Aboriginal labour force status. However, known predictors of employment such as age, gender, family status, mobility, and place of residence only explain a portion of the difference in the odds of employment between Aboriginal peoples and non-Aboriginals. Clearly Aboriginal status and other individual and structural factors play a role in circumscribing the employment prospects of Aboriginal Canadians.

Policy Implications

High levels of participation in the labour market reveal that the problem is not exclusively about employment incentives. Rather, the problem is jobs. The problem is unsupportive learning environments. The problem is the health and sustainability of Aboriginal communities. The problem is the historic legacy of colonialism and racism. Part of the answer strongly suggested by our study is the critical need to increase the educational attainment of Aboriginal people. There is a pressing need to encourage young people to complete high school, at a minimum, particularly First Nations youth on reserves. Resources are also needed to encourage Aboriginal people to pursue post-secondary training, and to support other working-age

adults via continuing education and skills upgrading, literacy and basic skills development, apprenticeships and employment training, and job preparation and mentoring—with programs that are both culturally sensitive and inclusive. At the same time, investment in child care, transportation, assistance with other work-related expenses, as well as secure housing, is a prerequisite for any successful initiative. Employment programs that focus only on skills upgrading or job preparation will have limited success. As evidence from the review of the AHRDS reveals, systems of learning and support need to be fundamentally rethought for children, youth and adults. Similarly, initiatives that focus exclusively on the individual, and fail to take into account the family and/or community will not achieve lasting outcomes. In this regard, the nature of women's roles in the productive and caring activities of their communities demands particular attention.

Education is only part of the answer. Despite the significant return to education, the very size of the employment gap reveals the entrenched character of the structural problems facing Aboriginal communities across Canada. The socio-spatial isolation of Aboriginal people on reserves, in remote communities, in the North, and in our urban centres is a particularly difficult policy problem. What can be done, for instance, to improve the labour market on and around reserves. Canada's sizeable pool of low-wage employment—characterized by high turnover, poor working conditions, and limited earning or occupation mobility—is another significant policy challenge. Workers, particularly those with low levels of education as is common in the Aboriginal community, are effectively trapped at the bottom of the labour market. Over time, many are being pushed out of the labour market all together.

The Canada West Foundation makes the point that there is an opportunity to address Aboriginal labour market disparities to benefit Aboriginal people and non-Aboriginal people alike. In order to realize this potential however, policies and programs cannot be limited to communicating the benefits of educational attainment and labour market participation to Aboriginal people. Rather, policies and programs must embody an understanding of the "network of circumstances" surrounding an individual. "Factors such as social conditions, family and community influences, workplace alienation, individuals' aspirations, transition adjustments, access to financial and social support structures, and sense of identity all influence decisions and outcomes. These factors must be taken into consideration if policies and programs designed to improve labour market outcomes for Aboriginal people are to be successful (Brunnen 2003a, 22).

Our study has clearly only scratched the surface. A diverse range of factors—both individual and structural—influence the prospects of employment among Aboriginal peoples. Improving educational attainment and addressing gender inequities are clearly important in this regard. However, much remains to be done to create the conditions for greater economic security and well-being among Aboriginal peoples.

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Endnotes

1 There are several reasons behind this significant increase in population. The birth rate among Aboriginal peoples is comparatively higher than the birth rate among non-Aboriginals. However, at least half of the increase has been linked to the growing number of Canadians choosing to identify as Aboriginal. Statistics Canada has also noted that some of the increase is likely due to more complete enumeration of reserves in the 2001 Census. See Statistics Canada (2003b). Aboriginal Peoples in Canada: A Demographic Portrait, Catalogue No. 96F0030XIE2001007. Ottawa: Industry Canada.

2 The term "North American Indian" is used in the Census. In this report, we have elected to use the term First Nations people to describe this group.

3 In the following calculations, we have combined the "other Aboriginal" category (here including Aboriginal people of multiple Aboriginal ancestry and those who identified themselves as Registered Indians and/or Band members but not Aboriginal) with the First Nations category. This group represents less than 1% of the unweighted observations.

4 The Aboriginal population is expected to grow at an average annual rate of 1.8%, more than twice the rate of 0.7% for the general population. The Inuit population will have the fastest rate of growth (about 2.3%) compared with 1.9% for the North American Indian population and 1.4% for the Métis (these figures are based on medium growth scenarios) (Statistics Canada, 2005a).

5 As well, a larger proportion of Aboriginal adults live in common-law households compared to non-Aboriginal adults, 20% compared to 14%. These individuals are included under couple households in **Figure 1.1** (page 4).

6 Aboriginal people were also more likely to report that they did no housework at all compared to non Aboriginals (9% compared to 6%).

7 This may well reflect the younger age profile of the Aboriginal working age population.

8 The median income is the income which falls in the middle of the distribution of incomes for that year (ordered by size). The median represents the middle of the distribution of incomes and 50% of the incomes are below this income and 50% are above. In 2000, the median income for the Aboriginal population was $17,140; in 1995, median income was $14,190 (constant dollars). Among non-Aboriginals, median income was $26,700 (constant dollars) in 1995 and $29,780 in 2000.

9 The exception is Jerry White, Paul White and Stephen Obeng Gyimah (2003), "Labour Force Activity of Women in Canada: A Comparative Analysis of Aboriginal and Non-Aboriginal Women," Canadian Review of Sociology and Anthropology, Vol. 40, No. 4.

10 For the purposes of this study, Aboriginal Identity refers to those persons who reported identifying with at least one Aboriginal group in the Census, i.e. North American Indian, Métis or Inuit, and/or those who reported being a Treaty Indian or a Registered Indian as defined by the *Indian Act* of Canada and/or who were members of an Indian Band or First Nation. Those who report multiple Aboriginal identities are included as well. Please see the Methodology section.

11 For the purposes of this study, the analysis includes those who were born in Canada, and do not identify as an immigrant or a member of a visible minority. In instances where individuals identify as Aboriginal and an immigrant or visible minority, these cases have been excluded from the analysis.

12 This information is based on the variable "hours worked for pay or in self-employment in reference week." If the number of hours worked is greater or equal to 30, the employment is considered full-time. However, this variable is not perfectly related to the job held by individual at time of the Census; rather it refers to the number of hours that a person worked at all jobs held in the week prior to the Census day. Thus, the number of hours may correspond to one main job or to several jobs. In addition, if a person was absent, with or without pay, for part of the week because of illness, vacation, or some other reason at time of the Census, the information was not gathered. In this case, when it was possible, we have imputed the information on the number of hours worked.

13 The employment rate refers to the number of persons employed in the week prior to Census day, expressed as a percentage of the total population aged 25 to 64 years.

14 The unemployment rate refers to the number of persons who are unemployed during the reference week prior to Census day, expressed as a percentage of the labour force.

15 There is ongoing debate about the National Occupational Classification and its definition of skill levels. These levels are based largely on educational requirements for particular occupations and not a detailed assessment of the required skills. That said, we are using the NOC classification system as the one available to us. It provides a useful tool to assess the match of employment and education/skill within the working age population.

16 Please note that management occupations have been excluded from the following analysis because there are no set skill requirements for a management job.

17 Please note that there are many factors that influence the likelihood of employment. We have included six important factors in our analysis.

18 Our age squared (age^2) variable is significant and decreases the likelihood of employment in the three models.

19 This finding is not surprising as the respondents are over age 25 and are thus more likely to be pursuing education on a part-time basis.

20 After controlling for the covariates in our model, both the Inuit and Métis are still more likely to be employed than First Nations people. However, the Inuit have higher odds of employment than the Métis, both compared to First Nations people: 1.76 to 1 and 1.67 to 1 respectively.

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Appendices

Appendix 1.1 Logistic Regression Output: Summary

	Be employed		Be employed full time		Be employed in a job that matches one's qualification and skills	
	Logit	**Odds**	**Logit**	**Odds**	**Logit**	**Odds**
With no covariates						
Be an aboriginal person	-0.84**	0.43	-0.68**	0.50	-0.32**	0.73
Constant	1.17**		0.60**		-0.60**	
Model information						
Log likelihood	369,502.54		436,614.25		434,021.65	
Chi Square	1,762.10		1,256.19		234.381	
Level of signification	< 0.001		< 0.001		< 0.001	
With covariates (full model)						
Be an aboriginal person	-0.73**	0.48	-0.60**	0.56	-0.22**	0.80
Constant	-3.45**		-3.50**		-2.68**	
Model information						
Log likelihood	320,147.63		383,482.32		420,876.69	
Chi Square	51,117.00		54,388.11		13,379.35	
Level of signification	< 0.001		< 0.001		< 0.001	

* p<.05 ** p<.01 Odds=e^{logit}

Appendix 1.2 Likelihood of Being Employed

Odds of being employed	Model 1 Total (25-64 yrs)		Model 2 Aboriginal		Model 3 Non-Aboriginal	
	Logit	Odds	Logit	Odds	Logit	Odds
Aboriginal identities[a]						
First Nation	-0.91**	0.41	--	--	--	--
Métis	-0.35**	0.71	0.51**	1.67	--	--
Inuit	-0.44**	0.64	0.57**	1.76	--	--
[Non Aboriginal]	--	--	--	--	--	--
Education						
[Less than high school]	--	--	--	--	--	--
Secondary graduation diploma	0.62**	1.86	0.86**	2.38	0.61**	1.83
Trade certificate	0.76**	2.14	0.96**	2.61	0.74**	2.10
College certificate/diploma	1.02**	2.84	1.38**	4.00	1.02**	2.78
University diploma	1.26**	3.55	1.61**	5.00	1.25**	3.50
Student						
Full time	-1.47**	0.23	-1.23**	0.29	-1.50**	0.22
Part time	0.26**	1.30	0.35**	1.41	0.25**	1.29
[not at school]	--	--	--	--	--	--
Gender						
Female [male]	-0.71**	0.49	-0.37**	0.69	-0.73**	0.48
Age						
Age	0.27**	1.30	0.19**	1.21	0.26**	1.30
Age2	-0.004**	0.99	-0.003**	0.99	-0.004**	0.99
Family situation						
Be an unattached individual	-0.21**	0.81	-0.18**	0.83	-0.21**	0.81
[Be in an economic family]	--	--	--	--	--	--
Be a lone parent	-0.14**	0.87	-0.35**	0.70	-0.13**	0.89
[Not a lone parent]	--	--	--	--	--	--
Geographies						
CMA [non CMA]	0.24**	1.27	0.33**	1.40	0.23**	1.26
Movers [non-movers]	-0.17**	0.84	-0.24**	0.78	-0.17**	0.85
Constant	-3.44**		-3.70**		-3.40**	
Model information						
Log likelihood	319989.81		13653.35		306047.45	
Chi square	51274.83		1708.68		48093.07	
Level of signification	<0.001		<0.001		< 0.001	

[a] Categories of reference are in [ ]; Non-Aboriginal is the category of reference only in model 1; First Nation is the category of reference only in model 2

* p<.05 ** p<.01

Odds=elogit

Appendix 1.3 Likelihood of Being Employed Full-time

Odds of being employed full- time	Model 1 Total (25-64 yrs)		Model 2 Aboriginal		Model 3 Non-Aboriginal	
	Logit	Odds	Logit	Odds	Logit	Odds
Aboriginal identities[a]						
First Nation	-0.73**	0.48	--	--	--	--
Métis	-0.30**	0.74	0.38**	1.46	--	--
Inuit	-0.45**	0.64	0.36**	1.44	--	--
Non-Aboriginal	--	--	--	--	--	--
Education						
[Less than high school]	--	--	--	--	--	--
Secondary graduation diploma	0.51**	1.67	0.81**	2.24	0.50**	1.65
Trade certificate	0.61**	1.85	0.84**	2.31	0.60**	1.82
College certificate/diploma	0.76**	2.15	1.20**	3.33	0.74**	2.10
University diploma	0.95**	2.58	1.52**	4.58	0.93**	2.53
Student						
Full time	-1.55**	0.21	-1.31*	0.27	-1.57**	0.20
Part time	0.19**	1.21	0.16		0.19**	1.21
[Not at school]	--	--	--	--	--	--
Gender						
Female [male]	-1.07**	0.34	-0.61*	0.54	-1.09**	0.33
Age						
Age	0.24**	1.27	0.17**	1.19	0.24**	1.27
Age2	-0.003**	0.99	-0.002**	0.99	-0.003**	0.99
Family situation						
Be an unattached individual	-0.05**	0.94	-0.11*	0.89	-0.05**	0.95
[Be in an economic family]	--	--	--	--	--	--
Be a lone parent	0.06**	1.06	-0.17**	0.84	0.07**	1.10
[Not a lone parent]	--	--	--	--	--	--
Geographies						
CMA [non CMA]	0.23**	1.26	0.30**	1.36	0.23**	1.26
Movers [non-movers]	-0.11**	0.89	-0.25**	0.78	-0.10**	0.90
Constant	-3.49**		-3.61**		-3.47**	
Model information						
Log-Likelihood	383,389.30		14,075.21		368,943.51	
Chi-square	54,481.14		1,551.58		52,043.95	
Level of signification	< 0.001		< 0.001		< 0.001	

[a] Categories of reference are in [ ]; Non-Aboriginal is the category of reference only in model 1; First Nation is the category of reference only in model 2

* p<.05 ** p<.01

Odds=elogit

Appendix 1.4 Likelihood of Having an "Appropriate" Job

Odds of having appropriate employment	Model 1 Total (24-65yrs)		Model 2 Aboriginal		Model 3 Non-Aboriginal	
	Logit	Odds	Logit	Odds	Logit	Odds
Aboriginal identities						
[First Nation]	-0.31**	0.73	--	--	--	--
Métis	0.010		0.28**	1.32	--	--
Inuit	-0.52**	0.60	-0.19		--	--
[Non-Aboriginal]	--	--	--	--	--	--
Education						
[Less than high school]	--	--	--	--	--	--
Secondary grad. diploma	0.14**	1.15	0.33**	1.39	0.14**	1.14
Trade certificate	0.51**	1.66	0.54**	1.71	0.51**	1.66
College certificate/ diploma	0.20**	1.22	0.33**	1.40	0.20**	1.22
University diploma	0.82**	2.27	1.10**	3.00	0.81**	2.26
Student						
Full time	-0.32**	0.72	-0.42**	0.66	-0.32**	0.73
Part time	-0.002		0.020		0.003	
[not at school]	--	--	--	--	--	--
Gender						
Female [male]	-0.19**	0.82	-0.25**	0.77	-0.19**	0.82
Age						
Age	0.11**	1.12	0.08**	1.09	0.11**	1.12
Age^2	-0.001**	0.99	-0.001**	0.99	-0.001**	0.99
Family situation						
Be an unattached individual	-0.07**	0.92	-0.17**	0.84	-0.07**	0.93
[Be in an economic family]	--	--	--	--	--	--
Be a lone parent	-0.07**	0.93	-0.19**	0.82	-0.07**	0.94
[Not a lone parent]	--	--	--	--	--	--
Geographies						
CMA [non-CMA]	0.02*	1.02	0.07		0.02**	1.02
Movers [non-movers]	-0.03**	0.97	0.02		-0.03**	0.97
Constant	-2.67**		-2.46**		-2.69**	
Model information						
Log likelihood	420824.74		13,060.07		407731.49	
Chi Square	13431.30		460.15		12769.95	
Level of signification	< 0.001		< 0.001		< 0.001	

[a] Categories of reference are in [ ]; Non-Aboriginal is the category of reference only in model 1; First Nation is the category of reference only in model 2

* p<.05 ** p<.01

Odds=e^{logit}