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Intergenerational Transmission of Education among Indigenous People in Canada

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Abstract

Differences in parental education play a key role in inequality of opportunity, but the relationship between parents' and children's education may differ by demographic group. This paper compares intergenerational education correlations for a recent cohort of Indigenous and non-Indigenous adults in Canada – these correlations are much weaker for Indigenous people, with a large proportion explained by weak university attainment of Indigenous adults whose parents had a university degree. Without a change in these correlations in current generations, these differing dynamics would if anything mean the education gap between Indigenous and non-Indigenous people in Canada would widen. Looking at a recent cohort of young children, however, there appears to be a similarly weak relationship between standardized test scores and parental education among Indigenous people, suggesting the differing dynamics between the two groups may persist.

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1. Introduction

Completed educational levels of Indigenous[2] people in Canada have remained persistently below those of non-Indigenous people, despite a number of policy reforms. Though there has been progress in absolute terms, in 2021 23.5% of Indigenous 20-24 year olds in Canada had not completed high school, compared with only 7.2% for non-Indigenous Canada-born youth.[3] Indigenous people in Canada are also much less likely to have attended or completed any form of post-secondary education. Similar gaps exist in Indigenous populations in other other countries, including the US (Akee et al., 2019) and Australia (Australian Institute of Health and Welfare, 2025).

The importance of education for Indigenous people has long been recognized by Indigenous people and communities, governments and other policy makers. Rights to education were enshrined in the treaties negotiated by First Nations peoples (Stonechild, 2006; Kirkness, 1999). More recently, the Kelowna Accord of 2005 set a goal of reaching parity in high school graduation rates between Indigenous and non-Indigenous students by 2015 – a goal that is not close to being attained a decade later. Lower levels of education are a key factor explaining the lower incomes for Indigenous than non-Indigenous people in Canada. But measured returns to education are quite similar for the two groups (Walters, White and Maxim, 2004; Pendakur and Pendakur, 2011, Frenette, 2012a, 2012b, O'Gorman and Pandey, 2015), including for those living on-reserve (Feir, 2013). Increased education levels are likely to be an important contributor to higher long-run living standards for Indigenous people and communities.

In this paper I examine a key determinant of educational outcomes – parents' education. It is well established that there is a very strong positive correlation between completed education levels of parents and those of their children (Bussolo et al., 2023; Hertz et al., 2008; Butaeva et al., 2025; in

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[2] Indigenous people in Canada include First Nations, Inuit and Metis peoples. Not all First Nations people have Registered Status under the *Indian Act*. The terms used to describe Indigenous people have changed over time. Most recently, the term 'Aboriginal' was used, in particular by Statistics Canada in collecting data for the Census and the Aboriginal Peoples' Survey. I use Indigenous throughout, except in relation to the names of specific data sets or variables.

[3] Both rates have fallen considerably since Richards (2011) reported that among Indigenous people in Canada aged 20-24, 40% had not completed high school compared with only 11.9% for non-Indigenous Canadians.

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Canada, Sen and Clemente, 2010; Aydemir, Chen and Corak, 2012; Sweetman and Dicks, 1999; Finnie, Lascelles and Sweetman, 2005), a substantial portion of which appears to be causal (Oreopoulos and Page, 2006; Behrman and Rosenzweig, 2002). Kean and Wolpin (2001: 1051) note that the underlying causes of this correlation is the subject of "contentious debate in the social sciences". Much the same is true of the consistent findings of intergenerational transmission of other characteristics.

Differences in parental education have been found in previous research to contribute to education differences between Indigenous and non-Indigenous children. Leigh and Gong (2009) look at test scores that measure cognitive achievement among 5 year olds in Australia and find substantial gaps between Indigenous and non-Indigenous youth, with one to two thirds of the performance gap explained by parental education differences. Frenette (2012a) uses the Youth in Transition Survey Cohort A, to decompose gaps between post-secondary attendance of Indigenous compared with non-Indigenous youth. He finds that differences in academic performance in the K-12 system are the most important determinant, with mother's education playing a small role and parental income very little once school performance is taken into account. In Canada, Friesen and Krauth (2010) use school level data from the province of British Columbia (BC) to explore the factors underlying the gap in test scores between Indigenous and non-Indigenous students, finding substantial sorting across schools leads to differences in school quality attended. They attribute about half the test score gap to between-school differences, including average parental income in the school's neighbourhood.

I show that while differences in parental education across the two groups are large and may explain completed education gaps in Canada, there are also very different patterns of intergenerational transmission of education among Indigenous people in Canada than among non-Indigenous people. Using data from multiple waves of the General Social Survey (GSS) and from the Aboriginal Peoples' Survey (APS), I find that among adults in Canada around 2005-2010, the correlation between parents' and own education was weaker for Indigenous than non-Indigenous people (Statistics Canada, various years; Statistics Canada, 2015). In particular, Indigenous people with university educated parents are much less likely to complete post-secondary education than

are non-Indigenous people with university educated parents. The different intergenerational education transmission patterns imply steady state education distributions that are if anything exhibit larger gaps in completed educational levels between the two group than current gaps.

I then use data from Canada's Census linked to data from the school system in the Canadian province of British Columbia (BCK12 data)[4] to examine the relationship among more recent cohorts, and looking at school-level rather than completed outcomes. I find a similar pattern evident earlier in the school system – test scores in elementary school in the Canadian province of British Columbia are higher for those with university educated parents than for those with less educated parents, but the gradient is flatter for Indigenous students.

Similar heterogeneity in the dynamics of transmission of characteristics of parents to their children across groups in a society has been shown for income in the US, where research has found that there is less upward and more downward intergenerational income mobility for Black and Native children than for White children (Bowles and Gintis, 2002; Mazumder, 2014; Davis and Mazmder, 2018; Chetty et al., 2020, Akee et al., 2023). Chetty et al. (2020) note that this can explain large steady state income gaps across groups.

I also contribute to the research on education outcomes for Indigenous people in Canada. In terms of intergenerational correlations, Feir (2016a, b) identifies a puzzle that residential school attendance appears to have increased education levels of the attendees, but that the children of residential school attendees experienced struggles during their schooling. Jones (2024) found that parental residential school attendance is negatively associated with their children's educational attainment, with suggestive evidence of a channel through cultural identification. Bacic and Zheng (2024) show that parental income is more strongly correlated with test scores of Indigenous students in the British Columbia school system – a result that contrasts with the weaker effects of parental education that I find using the same data.

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[4] Linked as part of the Education and Labour Market Longitudinal Platform (ELMLP)

The paper is structured as follows, Section 2 very briefly reviews some of the key institutions re education for Indigenous people in Canada. Section 3 describes the three data sets used in this paper – the GSS, APS and BCK12 data. Section 4 uses the GSS and APS to describe the transition matrix in completed education levels for Indigenous and non-Indigenous adults, showing that the historic intergenerational dynamics would if anything lead to divergence in attainment levels between the two groups compared to recent levels. Using linear probability models, it also shows that the results are robust to inclusion of a variety of controls, and examines how family residential school experience is associated with intergenerational education transmission among Indigenous people. Section 5 uses the BCK12 data to show that there is evidence that in at least one province in Canada – British Columbia – recent cohorts of school children see a similar weaker transmission of parental education in primary school standardized test scores. Section 6 concludes.

2. Indigenous Education in Canada

There are a number of ways in which Indigenous people in Canada face a rather different institutional environment than do non-Indigenous people. Education is a provincial government responsibility, and Indigenous children living outside reserves are typically educated in the provincial system. For those on-reserve, responsibility has historically fallen to the federal government and its agents, as in the residential school era, with authority having been devolved to some extent to Indigenous authorities (Brady, 1995). A recent report notes that funding for on-reserve schools has lagged that of similarly situated provincial schools (Parliamentary Budget Officer, 2016).

Exposure to residential school experience, whether directly or through one's parents, may also have negative effects on school performance. Overall, the findings are that own residential school experience may be associated with higher high school graduation rates (Feir, 2016a), but that parental experience of residential schools may be associated with more problems for children during their schooling (Feir, 2016b). Jones (2024) finds that these effects could be ameliorated by in-school cultural/language practices.

Indigenous people are more likely to live in rural and remote areas than are non-Indigenous people. Layton (2025) with more recent data shows that "accessibility of one's community

remained an influential factor for having completed high school for First Nations people, Métis, and Inuit." That said, even within rural and in urban areas, education gaps persist between Indigenous and non-Indigenous students (Richards, 2008).

Finally, post-secondary financial aid policies are somewhat different for Indigenous people in Canada. Jones (2023) notes that post-secondary financial aid programs for Indigenous youth are somewhat different to that for non-Indigenous youth, and finds that large reductions in financial aid for post-secondary studies for Indigenous youth in Canada are associated with declines in post-secondary completion rates and high school graduation rates on-reserve.

One thing that doesn't appear to differ much between the two groups is the proportional returns to education (Feir, 2013; Pendakur and Pendakur, 2011; Walters et al., 2004; Frenette, 2012a,b; and O'Gorman and Pandey, 2015). However, Indigenous people earn less than non-Indigenous people conditional on their level of education, so that there are considerably lower absolute returns to education. Feir (2013) also notes that there did appear to be a lower return to education for Indigenous people living on-reserve for older cohorts, although this has effect is not apparent in more recent years. Pendakur and Pendakur (2011) find a bigger income gap for Indigenous people in the prairie provinces than in the cities of Toronto, Vancouver and Montreal. This suggests that there may be differential incentives for geographic mobility among the Indigenous as compared with the non-Indigenous population.

3. Data

I use three different data sources in this paper: for overall correlations in completed education, I use the General Social Survey (GSS) for comparisons between Indigenous and non-Indigenous people, and the Aboriginal Peoples Survey (APS) for more detail on Indigenous people only; and for examination of the relationship between parents' education and children's elementary school test scores, I use the British Columbia Kindergarten to Grade 12 (BCK12) administrative data linked to the 2016 Census via the Education and Labour Market Longitudinal Platform (ELMLP). A key issue in each of these data sets is how parental education is measured. In the GSS and APS adult respondents are asked to provide information on their parent's education. In the BCK12-Census data, I use the Census reported education levels of children still living in their parent/s' household.

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Given that family structures can vary, I mostly use the highest education level of any parent regardless of sex. For the Census I do not include children living with foster parents or other adults who are identified to have a relationship other than parent.

3.1 General Social Survey and Aboriginal Peoples Survey

Summary statistics for the GSS and APS data are in Table 1.

Table 1 Summary Statistics: General Social Survey and Aboriginal Peoples Survey

| | GSS | | | | APS | |
| | Non-Indigenous | | Indigenous | | Indigenous | |
	%	count	%	count	%	count
		32,931		1,666		7,549
% male	50.1	14,740	49.4	745	44	4,372
% 30-39 (25-34 for APS)	31.2	9599	31.6	511	49.1	3,737
%40-49 (35-45 for APS)	36.0	11278	39.7	600	50.9	3,812
%50-59	32.9	12054	28.7	555		
% rural	26.4	11499	41.9	803	47.4	3,309
% with a uni degree	27.5	8722	12.3	211	13.7	898
% with PSE					52.9	4,638
% completed high school	90.0	29263	78.5	1275	83.7	5,593
% with father with uni degree	14.9	3804	6.6	79		
% with father with PSE					28.9	1,754
% with father completed HS	53.7	14187	35.0	403	56.5	3,101
% with mother with uni degree	10.6	2882	7.2	98		
% with mother with PSE					31.7	2,206
% with mother completed HS	59.5	16364	43.5	549	65.8	3,913

Source: General Social Survey, waves 2006, 2008, 2009, 2010; Aboriginal Peoples Survey 2012

The GSS has data required on both own and parent/s completed education, along with (Self-reported) Indigenous identity in the 2006, 2008, 2009 and 2010 waves. Combining the waves yields a sample of 1666 Indigenous people aged 30-59, of which 1202 report their father's education, 1301 report their mother's education, 1125 who report both and 1334 report either. The APS has a larger sample of Indigenous respondents than the GSS, but has less detailed parental education information – it groups college diplomas and university degrees together into an aggregated post-secondary qualification category. Sweetman and Dicks (1999) and Sen and Clemente (2010) find that there is a stronger correlation between fathers' education levels and

those of the subsequent generation than for mothers' education levels. Hertz et al (2007) use the average education level of the two parents in years of education completed, or the education level of whichever parent they have information on. While I show some results using mothers' and fathers' education levels separately, for the most part the estimates are constructed using the highest of the parents' reported education levels, or the education level of the parent for whom the respondent reports an education level if only one is reported.

Consistent with other sources of information on Indigenous education achievement (Richards, 2008), the GSS shows that younger cohorts typically have more education than older cohorts, but that this increase has been slower among the Indigenous people in Canada than the non-Indigenous Canadian-born population. Figure 1 shows the percentage of each group completing some post-secondary education, by age group. Education levels are lowest for both groups among older cohorts, and highest among those in their early 30s. But on average, Indigenous peoples' post-secondary attendance rates increased by roughly 8 percentage points between the 55-59 year old group and the 30-34 year old group, compared with 15.6 percent for non-Indigenous Canadians. The figure also shows the drop in post-secondary attendance rates in the youngest group of Indigenous people, which is more likely a reflection of delayed entrance to post-secondary education than of a recent decline in completed educational attainment. I therefore restrict the sample to those aged 30 to 59.

Figure 1 Percentage of population completing some post-secondary education, by 5 year age group
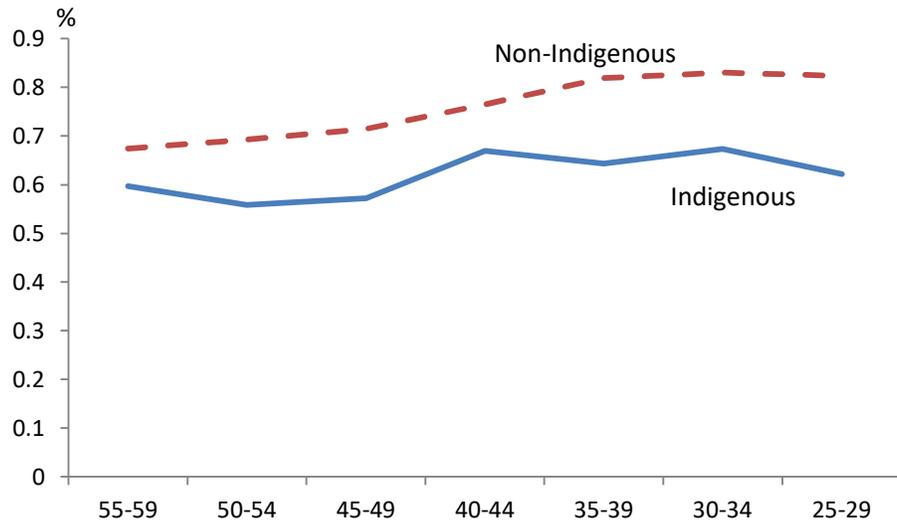
Source: Statistics Canada (various years), General Social Survey, waves 2006, 2008, 2009, 2010

As shown in the summary statistics in Table 1, the Indigenous population is slightly younger on average than the non-Indigenous population. They are more likely to live in rural areas, and are less than half as likely to have a university degree. Indigenous mothers are more educated on average than Indigenous fathers, while non-Indigenous mothers are more likely to have completed high school than fathers, but are less likely to have completed university. Overall, Indigenous parents have lower completed education levels than non-Indigenous parents. There are nonetheless a reasonable number of Indigenous parents in the sample who have completed a university degree, albeit not a large enough number to allow much further splitting of the sample.

I also use data from the 2012 Aboriginal Peoples Survey (APS) which gives a larger sample of Indigenous people (7549) as well as additional demographic information including self-reported history of any family residential school attendance. In the APS, only respondents under 45 are asked about parental education, so the sample is younger than that of Indigenous people in the GSS, is more educated, and has more educated parents.

Both the GSS and APS sampling frames exclude people living on Indigenous reserves. This research, then, is unable to speak to issues faced by those currently living on reserve, although respondents

may have grown up or spent time on reserve. People on reserve account for roughly 18 percent of Indigenous people in Canada, or about 40 percent of Status First Nations people. Education levels are higher among Indigenous people living off- than on-reserve.

3.2 British Columbia Schools Administrative Data linked to the 2016 Census

To examine the roots of the relationship between completed education levels, and to investigate a more recent cohort of students, I use data from Canada's Education and Labour Market Longitudinal Program (ELMLP), which links between the administrative data from the British Columbia school system (BCK12 data) to the 2016 Census.

The 2016 Canadian long-form Census is a 20% random sample of the population overall, but a 100% sample of the on-reserve population. The data identifies all members of a household or family and their relationship to each other. It is therefore possible to identify the parents for any youth living with their parents, and so construct a parental education variable. Since family structures can vary (single parent, same sex), I take the maximum level of education of any of the parents identified in the Census Family as the measure of parental education.

Unlike the GSS and APS data, this data set does not contain parental education information for anyone not living in the same household as their parents in 2016. While a large majority of 15- to 17-year-olds are living in a household with their parents, the rate drops as children age. For all youth, a substantial fraction no longer live with their parents by the age of 20 – a point in time when many would still be potentially enrolled in post-secondary education. In addition, rates at which youth live in households with their parents are considerably lower for Indigenous youth, even at very young ages. A part of the reason for this is that Indigenous children are much more likely to be in foster care than non-Indigenous students (for children under 18 in the matched data set for BC, around three percent of Indigenous children are in foster care compared with 0.2 percent of non-Indigenous children). But even accounting for that, Indigenous youth are less likely to live with at least one of their parents than non-Indigenous youth, in BC and in Canada in general. When using parental education data, I estimate models for all youth, including an 'unknown parental education' category for those who are not living with their parents, and a separate model that only includes those living with their parents in the sample. Results are very

similar across the two specifications, suggesting that differential rates of leaving home by parental education do not affect the results too much. This strategy doesn't work well for income, since parental or family income is quite different for those not living with their parents. I do not use family/household income data for those living separately from their parents.

I use the ELMLP record match to link students identified in both the BCK-12 data and the Census. The match rate from the BCK-12 to Census data was close to the 20% expected for the non-Indigenous group,[5] with a higher match rate for the Indigenous group. This latter is because Canada's Census attempts a 100% sample for the on-reserve population, in which Indigenous people are over-represented. For this analysis, I use only those aged 18 or below at the time of the 2016 Census, because of the increase in rates of leaving home with age (Figure 2). This means that the sample skews to the more recent cohorts of students from the BCK-12 data. I also include only youth born in Canada according to the Census.[6]

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[5] The 2016 Census is a 20% sample of the Canadian population, while the BCK12 administrative data should capture the population of school students in BC. Roughly 98% of the students identified in the BCK12 data set have an ID that allows links to the Census. Links were made for 19.0% of the non-Indigenous students in the BCK12 sample and 26.7% of the Indigenous students. The higher match rate for Indigenous students reflects the fact that the Census surveys 100% of people on Indigenous reserves.

[6] The ELMLP data are subject to strict confidentiality rules. Data release restrictions mean that I am unable to provide unweighted sample sizes and am unable to provide summary statistics until the analysis is ready for publication.

Figure 2. Proportion of children in matched Census-BCK12 sample living away from parent/s by Indigenous status
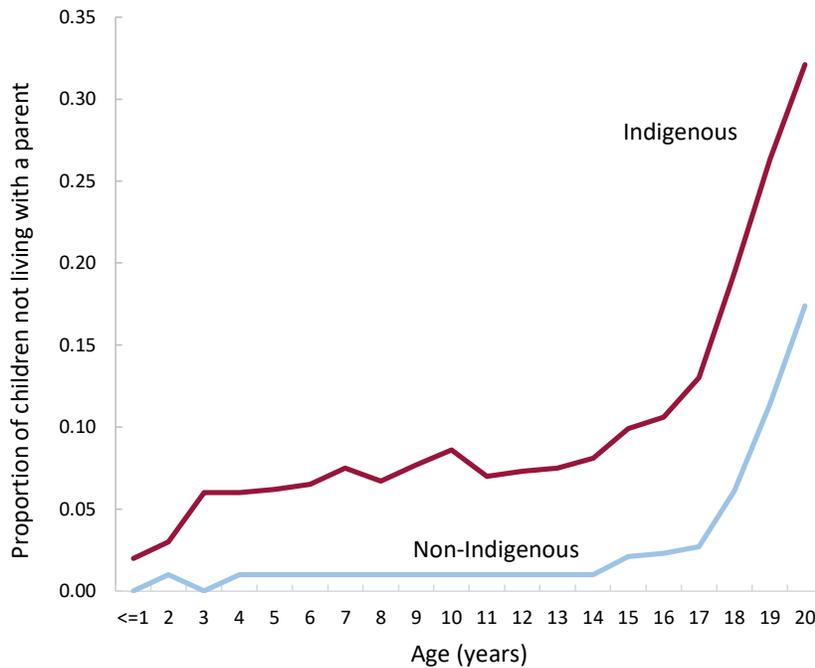
Source: Statistics Canada (2020): Educational and Labour Market Longitudinal Platform, BCK12 linked to Census

4. Analysis of Correlations Between Completed Education Levels: GSS and APS

I take two basic approaches to investigating the overall relationship between completed education levels of parents and their children. First, I show a set of transition matrices that describe, for each level of parental education, the percentage of children who have completed each level of education. These transmission matrices describe a Markov chain process, which I use to show that if the dynamics of the current generation of adults were to continue, there would be no convergence – indeed some slight divergence – in completed education levels of Indigenous and non-Indigenous people in Canada in future generations. Second, I use regression analysis to show that the patterns shown in the transition matrices are robust to the inclusion of a number of control variables, including sex, age group, current residence in a rural area, province of birth, and the year the survey was undertaken.

4.1 Transition matrices

Figure 3 shows the correlations between the two generations' completed education levels in in GSS in the form of a transmission matrix. Education levels are broken down into 5 categories: (1) those who have an undergraduate or graduate university degree; [7] (2) those who have a community college degree or diploma;[8] (3) those who have completed some post-secondary education but do not have a degree or diploma; (4) those who have graduated from high school; and (5) those who did not complete high school. Parental education is divided into the same categories, taking the highest level of education of either parent.

Figure 3 Transition Matrices from General Social Survey
a. Non-Indigenous   **b. Indigenous**
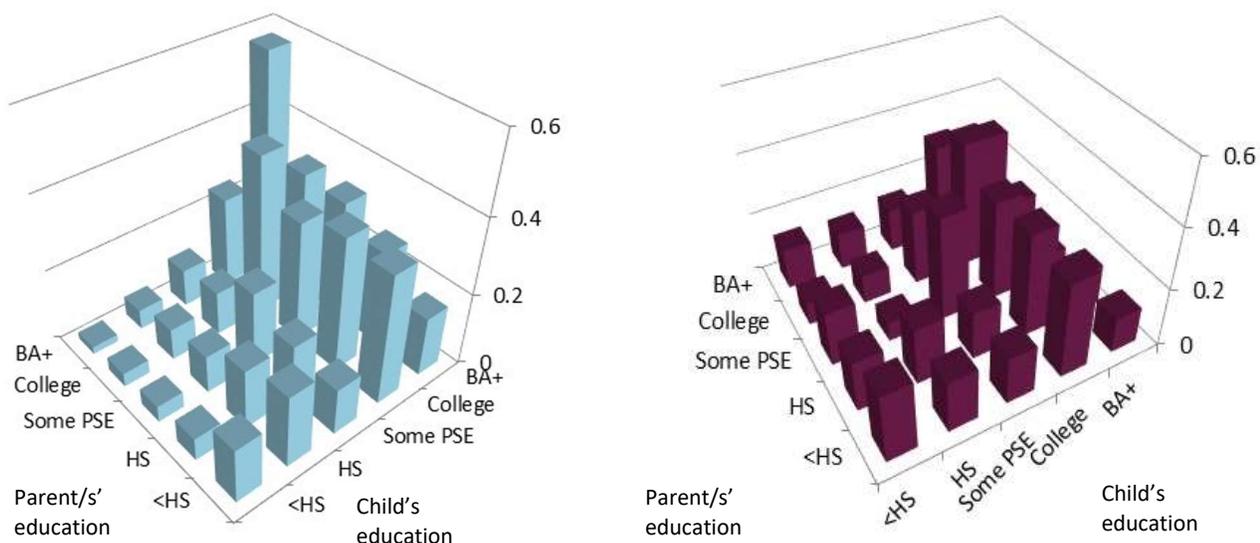
Note: These figures show the percentage of individuals who have the education level indicated on the right side of the diagram, conditional on having a parent or parents with at least the education level identified on the left. The education levels are: (1) at least one parent has a university degree; (2) at least one parent has a college degree or diploma (but neither has a university degree); (3) at least one parent has some post-secondary education (but neither has graduated from a university or college); (4) at least one parent has a high school diploma (but neither has further education); and (5) neither parent has a high school diploma. Thus, among Indigenous people with at least one parent with a university degree, 29% themselves have a university degree, while for non-Indigenous people 58% do.
Source: Statistics Canada (various years): General Social Survey, waves 2006, 2008, 2009, 2010.

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[7] Equivalent to a degree from a four-year college in the US.
[8] Equivalent to a two year degree from a community college in the US.

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Figure 3a shows the pattern that is broadly familiar from other studies of intergenerational education correlations – a very strong relationship between parents' completed educational levels and those of their children. It is immediately clear looking at Figure 3b that the dynamics of intergenerational education transmission are very different for Indigenous people than for non-Indigenous people. In general, Indigenous children are much less likely to complete post-secondary education than are non-Indigenous children, regardless of their parents' level of education. While for non-Indigenous Canadians the probability of leaving education without a high school diploma is extremely low for anyone with at least one parent who has some post-secondary education experience (ie categories 1 through 3), high school dropout rates for the Indigenous population are high even for those with the most highly educated parents.

The differences in the patterns of education transmission between Indigenous and non-Indigenous transmission are smallest among children of the least educated parents – 12 per cent of Indigenous children of high school dropouts complete a university degree, compared with 16 per cent of non-Indigenous children of high school dropouts. Overall, there is stronger intergenerational persistence of education among non-Indigenous Canadians than among Indigenous people in Canada.

The same data are shown in numeric/heatmap form in Table 2.[9] The transition matrices along with a starting distribution (π_0) describe a Markov Chain process (Blum et al, 2024). A Markov Chain process if left undisturbed will converge to a steady state (π^*). The degree of persistence or memory in the process can be characterized the number of generations it takes to get close enough to the steady state. If parental education has little effect on childrens' education, then the process has little memory/low persistence, or high mobility, and would converge quickly to the steady state.

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[9] Appendix Table A1 shows that this pattern holds for men and women, although both Indigenous and non-Indigenous women have higher upward mobility than similar men.

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Table 2 Transmission Matrices and initial and implied steady state distributions, GSS

Parent's education	Child's education					Initial distribution π_0	Steady state distribution π^*
	<HS	HS	Some PSE	College	BA+		
Non-Indigenous							
<HS	15.3%	20.1%	12.9%	35.4%	16.3%	33.4%	3.8%
HS	6.3%	16.5%	14.9%	36.5%	25.8%	29.1%	8.7%
Some PSE	4.5%	10.5%	20.6%	32.7%	31.8%	5.5%	12.7%
College	3.8%	8.7%	12.0%	42.9%	32.6%	13.3%	33.1%
BA+	2.0%	5.5%	10.3%	24.6%	57.7%	18.7%	41.8%
Indigenous							
<HS	23.0%	17.3%	15.8%	31.9%	11.9%	49.5%	14.2%
HS	16.8%	19.0%	16.0%	34.4%	13.7%	24.5%	11.5%
Some PSE	18.0%	6.6%	34.8%	33.0%	7.6%	4.4%	23.4%
College	7.7%	9.6%	25.0%	41.5%	16.1%	11.4%	35.7%
BA+	13.5%	12.3%	14.6%	30.8%	28.8%	10.3%	15.2%

Source: own calculations from Statistics Canada (various years): General Social Survey, waves 2006, 2008, 2009, 2010

In this case, the pattern described by the transmission matrix for Indigenous people displays less memory (more mobility) than that for non-Indigenous people, so converges more quickly to the steady state. Starting from an equal distribution of parental education levels (ie 1/5th of the population is in each group), it would take roughly five generations to get to the steady state for the Indigenous group compared with seven for the non-Indigenous group. The matrix for Indignenous people also displays less upward/more downward mobility than that for non-Indigenous people. Thus steady-state education levels are lower under the Indigenous transmission process. In the steady state, the Indigenous transmission process would have only 15 percent having a university education compared with 42 percent for the non-Indigenous people. That is, if all else stayed the same and the only factor that led to differences in education outcomes across generations was parental education and the transition matrices shown here, we'd expect those levels of education in the long run. Both are somewhat higher than education levels in the current adult cohorts.

Blume et al. (2025) propose a number of measures to characterize the degree of memory of a particular process. **Error! Reference source not found.** shows their Sub-group Difference Memory curve, which shows the distance between the two populations' vectors for any generation, starting from the actual distribution of education in the current generation and applying a single transition matrix to each.[10] The figure shows the considerable differences between the intergenerational dynamics in the two processes, with faster convergence (to a lower education level) under the transition mechanism for Indigenous people. The figure also shows that the two steady state distributions in Table 2 imply divergence between the two distributions, with a bigger gap in university attainment rates for the two groups emerging over time. This is in large part a result of the lower intergenerational persistence in university education for Indigenous people. One way of looking at this is that to close the gap between education levels of Indigenous and non-Indigenous people in Canada, there needs to be a change in the pattern of intergenerational transmission of education.

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[10] They define the Sub-group Difference Memory Curve as: $SDM(t, \pi_0, P, \mu_0, P) = \|\pi_0 \cdot P^t - \mu_0 \cdot P^t\|_{TV}$

Figure 4 Sub-group Difference Memory Curves and Implications for Convergence
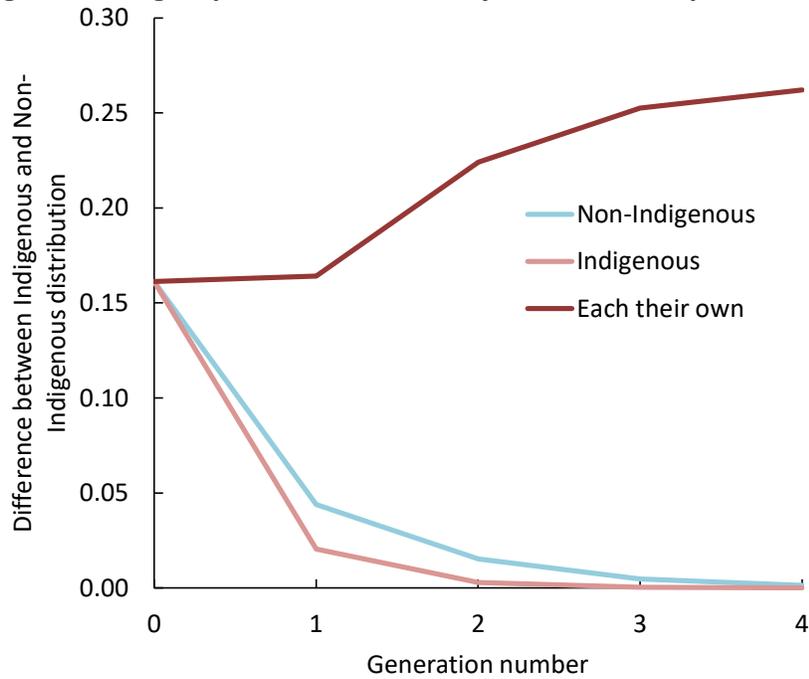
Notes: shows the rate of convergence of the Indigenous education distribution to the non-Indigenous distribution, assuming (a) all have the same transition matrix as non-Indigenous people; (b) that all have the same transition matrix as Indigenous people; as well as the measure of difference applying to each starting distribution the group's own transition matrix.
Source: Calculations from Figures in Table 2.

The relatively low persistence shown in the transmission matrices in the GSS is also evident in the transmission matrices from the APS (Table 3).

Table 3 Transmission matrices by sex of child, Aboriginal Peoples Survey

Child's sex	Parent/s' Education	Child's education < HS	HS	Some PSE	College	BA+
Male						
	< HS	27.52	17.93	18.61	31.88	4.06
	HS	16.19	19.35	19.92	37.47	7.06
	Some PSE	12.41	22.61	26.37	32.07	6.54
	PSE Diploma/Degree	11.59	12.1	19.83	40.86	15.62
Female						
	< HS	22.08	16.14	15.14	38.27	8.37
	HS	14.52	12.06	15.07	44.48	13.87
	Some PSE	8.36	15.8	10.07	39.45	26.33
	PSE Diploma/Degree	6.19	9.35	16.72	41.57	26.18

Note: The table shows the percentage of individuals who have the education level indicated in the columns, conditional on having a parent or parents with at least the education level identified in the rows.
Source: Statistics Canada (2015): Aboriginal People's Survey, 2012

4.2 Regression analysis using GSS: Differing Relationships between Parents and Children's Education between Indigenous and non-Indigenous People

The main results on the overall relationship between completed education levels of parents and children are clear from the transition matrices. In order to demonstrate that the results are robust conditional on several personal characteristics, and to compare with previous studies, I also show results from regression analysis. The basic estimating model is a simple one that is common to previous studies:

$$E_{i,t} = \beta_0 + \beta_1 E_{i,t-1} + \rho X_{i,t} + \epsilon_{i,t} \qquad (1)$$

where $E_{i,t}$ is a measure of the education level of generation t (the respondents in the GSS or APS), $E_{i,t-1}$ is a measure of the education level of the previous generation, $X_{i,t}$ is a set of individual-level characteristics of generation t (including sex, province of birth, region of residence and age group at the time of the survey). I also include a set of fixed effects for the year of the GSS in which the individual was surveyed. I estimate the models with robust standard errors.

The main approach I use to incorporating parental education is to use a set of dummy variables for four possible levels of the highest level of education of any parent: (1) no high school graduation;

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(2) high school graduation; (3) some post-secondary education but no diploma; (4) a college diploma or certificate, below the degree level; (5) a bachelor's degree or above. I start, however, incorporating both mother's and father's education, and restrict to a binary education variable: whether the parent has a post-secondary credential or not. As shown, the results are largely robust to different ways of incorporating parental education.

Results from this model, using the GSS are in Table 4. They show that parents having post-secondary education is associated with a higher probability of graduating from any post-secondary institution, and from university. In the overall effects are fairly similar for both mothers and fathers. Having at least one parent with a post-secondary education is associated with a 21 percentage point higher rate of post-secondary attainment, and a 24 percentage point higher probability of graduating from university. For Indigenous people with parents without post-secondary education, post-secondary attainment rates are on average about 10 percentage points lower than for similar non-Indigenous people, and university attainment rates that are 9 percentage points lower. For Indigenous people with at least one parent who has a post-secondary degree, however, post-secondary attainment rates are an additional 10 percentage points lower than those of their non-Indigenous counterparts, and university attainment rates 17 percentage points lower. That is, the gap between the post-secondary or university attainment rate of Indigenous and non-Indigenous people is largest for those whose parent/s have some post-secondary education. Alternatively, the positive effect on own educational attainment of having a parent with post-secondary education is smaller for Indigenous than non-Indigenous people. Having a parent with some post-secondary education is associated with a 23 percentage point increase in the share of children with a university degree, but this is only around 5 percentage points for Indigenous people. This remains true after controlling for characteristics like sex, urban residence, and other factors. These are quite stark differences in the role played by parental education for Indigenous than for non-Indigenous people in Canada.

Table 4 Linear Probability Model estimates of the relationship between parental and children's education outcomes

	Probability of graduating from any post-secondary institution				Probability of graduating from university			
	Both parents		At least one parent		Both parents		At least one parent	
Father has some PSE	0.143	0.143			0.192	0.194		
	(0.007)**	(0.007)**			(0.007)**	(0.007)**		
Mother has some PSE	0.121	0.122			0.148	0.149		
	(0.007)**	(0.007)**			(0.007)**	(0.007)**		
At least one parent has some PSE			0.207	0.187			0.242	0.231
			(0.006)**	(0.006)**			(0.005)**	(0.005)**
Indigenous interacted by:								
Constant		-0.123	-0.120	-0.103		-0.095	-0.086	-0.066
		(0.017)**	(0.016)**	(0.016)**		(0.017)**	(0.015)**	(0.015)**
Father has some PSE		-0.081				-0.143		
		(0.042)				(0.040)**		
Mother has some PSE		-0.050				-0.080		
		(0.041)				(0.040)*		
At least one parent has some PSE			-0.101	-0.111			-0.174	-0.180
			(0.031)**	(0.031)**			(0.029)**	(0.029)**
Sex				0.026				0.011
				(0.005)**				(0.005)*
Urban resident				0.084				0.117
				(0.006)**				(0.006)**
Constant	0.582	0.587	0.565	0.491	0.220	0.224	0.207	0.064
	(0.003)**	(0.004)**	(0.003)**	(0.019)**	(0.003)**	(0.003)**	(0.003)**	(0.018)**
Observations	27124	27124	30920	30920	27084	27084	30866	30866
R-squared	0.04	0.05	0.05	0.06	0.08	0.08	0.07	0.09

* significant at 5%; ** significant at 1%

Note: sample is all individuals aged 30-59 in one of the GSS waves who are born in Canada, and have information on parental education, age group, sex, province of birth, and current location of residence. All models include controls for age group, wave of survey and province of birth. Estimates are from a linear probability model, weighted using sample weights and robust standard errors.

Aggregating the educational outcome for parents to a single category misses some of the richness in the intergenerational transmission of education that is obvious in the transmission matrices. Table 5 shows estimates including a set of dummy variables for the parental education levels. It includes the same two outcomes shown in Table 4, as well as the LPM estimates of the probability

of failing to complete high school.[11] The qualitative results are consistent with the overall correlations shown in the transmission matrices: after adding controls for a variety of factors, Indigenous people have lower education outcomes than do non-Indigenous people, and this gap is the biggest for children of the most educated parents. While having a parent with a university degree is associated with a 40 percent higher probability of graduating from university (compared with having a parent without high school graduation), the figure is only around 15 percentage points (40.4-25.6) for Indigenous people. Perhaps most starkly, there is no statistically significant protective effect of having a parent with a university degree on the risk of dropping out of high school for Indigenous people.[12]

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[11] Appendix Table A2 shows roughly the same model, but with separate estimates for Indigenous and non-Indigenous people. The estimates are slightly different, since in the interaction approach the Indigenous indicator variable is not interacted with every control variable.

[12] Appendix Table A3 shows these results broken down by age group. To some extent this should show whether there have been any long-run changes in the relationships between parents' and children's education. As shown in the transition matrices, there is some evidence of an increase in intergenerational education persistence for Indigenous children of university educated parents from the oldest age groups to the younger. For the 50-59 year age group the children of the most educated parents were no more likely to graduate from university than the children of the least educated parents, but in later cohorts there is now some positive correlation, though it remains weaker than in the non-Indigenous population.

Table 5 Linear Probability Model estimates of the relationship between parental and children's education outcomes

	Probability of graduating university		Probability of graduating from post-secondary		Probability of failing to graduate high school	
Constant	0.027	0.023	0.445	0.443	0.261	0.261
	(0.018)	(0.018)	(0.020)**	(0.020)**	(0.011)**	(0.011)**
Parent/s education (base = no high school)						
High school diploma	0.092	0.097	0.099	0.102	-0.079	-0.080
	(0.006)**	(0.006)**	(0.007)**	(0.007)**	(0.004)**	(0.004)**
Some uni/college	0.142	0.15	0.109	0.115	-0.098	-0.100
	(0.011)**	(0.012)**	(0.012)**	(0.013)**	(0.007)**	(0.007)**
Dip/cert from community college	0.153	0.16	0.217	0.222	-0.104	-0.103
	(0.008)**	(0.008)**	(0.009)**	(0.009)**	(0.005)**	(0.005)**
BA or above	0.396	0.404	0.282	0.287	-0.118	-0.119
	(0.007)**	(0.007)**	(0.008)**	(0.008)**	(0.005)**	(0.005)**
Indigenous interacted by:						
Constant	-0.096	-0.02	-0.118	-0.065	0.089	0.081
	(0.013)**	(0.018)	(0.014)**	(0.020)**	(0.008)**	(0.011)**
High school diploma		-0.094		-0.069		0.029
		(0.031)**		(0.034)*		(0.020)
Some university/community college		-0.193		-0.155		0.048
		(0.062)**		(0.067)*		(0.039)
Diploma/certificate from community college		-0.146		-0.113		-0.039
		(0.041)**		(0.045)*		(0.026)
Doctorate/masters/bachelor's degree		-0.256		-0.156		0.037
		(0.043)**		(0.047)**		(0.027)
Observations	30866	30866	30920	30920	30866	30866
R-squared	0.12	0.12	0.07	0.07	0.06	0.06

* significant at 5%; ** significant at 1%

Note: sample includes all individuals aged 30-59 in one of the GSS waves who are born in Canada and have information on parental education, age group, sex, province of birth, and current location of residence. Estimates are from a linear probability model, weighted using sample weights and robust standard errors. All regressions include controls for age group, sex, province of birth, current location of residence, and the year of the survey

4.3 Regression Analysis Using the Aboriginal Peoples' Survey (APS) – Residential School Background?

The GSS results are indicative of a difference in the intergenerational correlation of education between Indigenous and non-Indigenous people in Canada. But small sample sizes and a lack of other relevant demographic variables make it difficult to investigate the factors related to the correlation between parental and child education among Indigenous people in particular. The APS is more targeted to issues of interest to Indigenous communities, and surveys many more Indigenous people.

In particular, the 2012 APS asks about family members' experience of residential school. Feir (2016: 30) notes that "The intergenerational consequences of residential school on current students' educational experiences may be deeply embedded in the ways they experience school and how they may engage with the school system." The interaction between parental education and residential school experience may affect how children approach their own education choices.

Results in Table 6 are for the same basic model relating parent/s' education to that of their adult children, but broken down for men and women. They show a similar relatively positive but relatively weak relationship between parents' and their children's education outcomes as in the GSS for Indigenous people. The relationship between a parent having a post-secondary qualification and graduating from university is stronger among Indigenous women than Indigenous men. Having a parent with a post-secondary qualification is also associated with lower high school dropout rates compared with having no parent who completed high school, but a parent having a post-secondary qualification has limited additional effect for either men or women compared with having a parent who completed high school.

Both own and parental/grandparental experience o residential school is associated with higher high school drop outs and lower university completion rates after controlling for parental education. When having a parent or grandparent with experience of residential school is interacted with parental education, there is a large negative estimated effect on own university attainment of 10 percentage points for both men and women. That is, some portion of the lower estimated persistence of post-secondary and university education among Indigenous people may

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Table 6 Educational outcomes for Indigenous adults, Aboriginal People's Survey

	Graduated from University						Did not complete High School					
	Men			Women			Men			Women		
Highest parental education (LTHS):												
At least one High School	0.0285	0.0156	0.0044	0.0548 **	0.0453 *	0.0715 **	-0.1143 ***	-0.1498 ***	-0.1420 ***	-0.0814 ***	-0.1083 ***	-0.1379 ***
	(0.015)	(0.019)	(0.025)	(0.027)	(0.024)	(0.029)	(0.027)	(0.030)	(0.036)	(0.029)	(0.029)	(0.029)
At least one Some PSE	0.0335	0.0322	0.0659	0.1796 ***	0.2271 ***	0.1957 ***	-0.1519 ***	-0.1880 ***	-0.1285 **	-0.1486 ***	-0.1577 ***	-0.1772 ***
	(0.024)	(0.031)	(0.056)	(0.052)	(0.063)	(0.072)	(0.035)	(0.040)	(0.058)	(0.031)	(0.035)	(0.031)
At least one completed PSE	0.1128 ***	0.1239 ***	0.1664 ***	0.1788 ***	0.1869 ***	0.2394 ***	-0.1570 ***	-0.1879 ***	-0.1778 ***	-0.1658 ***	-0.1671 ***	-0.1416 ***
	(0.018)	(0.022)	(0.034)	(0.023)	(0.026)	(0.032)	(0.026)	(0.028)	(0.034)	(0.020)	(0.023)	(0.031)
Residential school experience (none):												
Self		-0.0084	-0.0089		-0.1080 ***	-0.1049 ***		0.0546	0.0534		0.0971 **	0.0959 **
		(0.039)	(0.039)		(0.037)	(0.037)		(0.040)	(0.040)		(0.048)	(0.048)
Parents/Grandparents		-0.0375 **	0.0024		-0.0253	0.0319		0.0581 ***	0.0821		0.0725 ***	0.0738 *
		(0.019)	(0.027)		(0.024)	(0.033)		(0.021)	(0.052)		(0.021)	(0.043)
Other		-0.0069	-0.0073		0.0124	0.0213		-0.0150	-0.0138		0.0432	0.0421
		(0.042)	(0.042)		(0.056)	(0.056)		(0.042)	(0.042)		(0.034)	(0.034)
Parent/Grandparent attended residential school*Parental education												
At least one High School			0.0389			-0.0522			-0.0200			0.0736
			(0.039)			(0.050)			(0.064)			(0.061)
At least one Some PSE			-0.0775			0.0489			-0.1273			0.0353
			(0.061)			(0.119)			(0.079)			(0.066)
At least one completed PSE			-0.1055 **			-0.1090 **			-0.0265			-0.0538
			(0.04)			(0.05)			(0.06)			(0.05)
Urban resident	0.0633 ***	0.0677 ***	0.0676 ***	0.0564 ***	0.0523 **	0.0526 **	-0.0266	-0.0276	-0.0274	-0.0135	-0.0217	-0.0216
	(0.014)	(0.017)	(0.017)	(0.020)	(0.022)	(0.022)	(0.018)	(0.019)	(0.019)	(0.017)	(0.017)	(0.017)
Ever lived in Indig comm	-0.0500 ***	-0.0431 **	-0.0363 *	-0.0099	-0.0054	-0.0030	-0.0297	-0.0425	-0.0415	0.0026	-0.0377 *	-0.0316
	(0.016)	(0.020)	(0.019)	(0.028)	(0.033)	(0.032)	(0.023)	(0.027)	(0.027)	(0.020)	(0.023)	(0.023)
Observations	2,985	2,237	2,237	3,635	2,825	2,825	2,985	2,237	2,237	3,635	2,825	2,825
R-squared	0.0461	0.0583	0.0678	0.0494	0.0593	0.0634	0.0357	0.0567	0.0581	0.0464	0.0607	0.0619

Standard errors in parentheses
* significant at 10%; ** significant at 5%; *** significant at 1%

Source: own estimates from Statistics Canada (20145): APS, 2012. Estimates are from a linear probability model, weighted using sample weights and robust standard errors. Includes controls for age group.

be explained by particularly low post-secondary persistence among the children of parents who have both post-secondary qualifications and residential school experience (on the part of the parents or *their* parents). Family experience of residential school may therefore explain some part of the overall difference in education transmission patterns, and higher downward educational mobility among Indigenous people in Canada.

5. Using the BCK12-Census data to explore the role of parents' education on earlier educational outcomes

As noted, if the intergenerational correlations found in the adult cohorts were to continue in current generations, the overall gap in educational attainment would if anything widen. However, there have been many policies that have been introduced in recent years, particularly in the school system, to attempt to reduce the gap. In this section I ask whether there is evidence of a similarly weak relationship between parents' and children's education in the a more recent cohort of children, using administrative data on individual students from the British Columbia school system (via the BCK12 data set) linked to data from the 2016 Canadian Census which can be used to identify family and parental characteristics.

The BCK12 data includes students' test results on the Foundational Skills Assessment (FSA) which is a standardized test conducted in grades 4 and 7, as well as data on later outcomes including courses taken and high school completion. To get reasonable data on parental characteristics, I restrict the sample to children who were 18 or under at the time of the 2016 Census, which means I have a relatively recent cohort of students. This means I have a larger sample of children with earlier school outcomes than of those with high school outcomes. I therefore restrict attention to the test results of the Grade 4 and 7 FSA tests on reading and mathematics. I normalize these test scores by test year to have a mean of zero and standard deviation of one.

The basic model is:

$$O_{is} = \gamma_0 + \sum_{g=1}^{G} \gamma_g E_{g,i} + \rho_0 Indig_i + \sum_{g=1}^{G} \rho_g \, Indig_i \cdot E_{g,i} + e_{is} \tag{2}$$

where O_{is} is the normalized test score (for Grade 4 or 7, reading or numeracy) for student i in school s, $E_{g,i}$ is a dummy variable equal to 1 if parental education is in category g, and $Indig_i$ is a dummy variable equal to 1 if the student is ever identified in the BCK12 schools administrative data as Indigenous (roughly 10% of students in the data). The ρ_g identify for each parental education category the gap in mean test scores between Indigenous and non-Indigenous students. I include students who are not identified as living at home (interacted by Indigenous identification) as an unknown parental education group to account for the previously described differences in rates of living away from home for Indigenous and non-Indigenous students. I show results that include controls for a quadratic in parental income in 2016 (interacted by Indigenous identification) for those children who lived with their parents at the time of the 2016 Census, and for age and school fixed effects. I estimate the model separately for girls and boys and report robust standard errors.

The results for Grade 4 are in Tables 7 to 10.[13] Parental education is a strong predictor of children's grade 4 test scores even after controlling for parental income, consistent with results from previous Canadian studies. Indigenous students with neither parent having completed high school (the omitted category) have considerably lower test scores on average than do non-Indigenous students, as do Indigenous students at each level of parental education. Point estimates for parental education at the BA level or above variable interacted with Indigenous status are consistently negative, and statistically significant in most cases for the Grade 4 tests.[14] There is a clearly flatter gradient in parental education compared with those whose parents have graduated high school for Indigenous students, relative to non-Indigenous students.

For a non-Indigenous girl, having a parent with a BA or above is associated with roughly a 0.23 standard deviation higher grade for numeracy and 0.27 standard deviation higher grade for reading than a girl whose parent/s have not completed high school. For an Indigenous girl, the

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[13] Results for Grade 7 are in the Appendix, Tables A4-7.
[14] For the Grade 7 tests, the estimates are also typically negative but not statistically significant.

gaps are smaller by about 0.1-0.12 standard deviations and 0.055 to 0.08 standard deviations smaller respectively. That is, the relative advantage of having a university educated parent for Indigenous girls is about 0.1-0.12 standard deviations for numeracy and 0.2-0.22 standard deviations for reading. For boys, the advantage from having a university educated parent is not statistically significantly different between Indigenous and non-Indigenous grade 4 students in reading, but for numeracy the gain is roughly 0.16 standard deviations for Indigenous boys compared with 0.24 standard deviations for non-Indigenous boys.

While it is possible that lower financial returns to education for Indigenous people among the parents' generation and a strong parental income gradient – possibly due to the ability to access resources (including private schools) or to living in regions with better schools – the results here do not suggest these are key to the differences in the effects of parental education across the two groups. Controlling for parental income (in linear or quadratic form – columns 2 and 3) and school fixed effects (column 6) changes the quantitative but not qualitative results.

In contrast to the weaker effects of parental education for Indigenous than non-Indigenous students, parental income generally speaking has a stronger positive relationship with test scores for Indigenous students. This is consistent with findings in Bacic and Zheng (2024), who do not include parental education in their analysis. The effects of income are also less salient than the education effects. For Indigenous students, an additional $100,000 in parental income is associated with test scores for girls on the grade 4 numeracy tests that are less than 0.09 standard deviations higher on average.

Table 7 Grade 4 Numeracy standardized test scores and parental characteristics, girls

	1	2	3	4	5	6
Base groups						
Constant (omitted ed category: no HS)	0.633***	0.628***	0.620***	0.713***	0.685***	0.856***
	(0.013)	(0.013)	(0.013)	(0.004)	(0.170)	(0.228)
Ever identified as Aboriginal (BCK12)	-0.101***	-0.113***	-0.119***	-0.196***	-0.133***	-0.064*
	(0.029)	(0.029)	(0.030)	(0.015)	(0.030)	(0.030)
Not living at home (no parental education or income information)						
Not at Home	-0.028	-0.022	-0.014	-0.107***	0.034	0.055**
	(0.020)	(0.020)	(0.020)	(0.016)	(0.021)	(0.021)
Not at Home * Indigenous	0.063	0.074	0.081	0.158***	0.076	0.033
	(0.041)	(0.041)	(0.042)	(0.033)	(0.042)	(0.042)
Parental Education						
Parent/s HS	0.042**	0.040**	0.036*		0.030*	0.038*
	(0.015)	(0.015)	(0.015)		(0.015)	(0.015)
Parent/s HS * Indigenous	0.02	0.008	0.002		0.005	-0.021
	(0.034)	(0.034)	(0.034)		(0.034)	(0.034)
Parent/s some PSE	0.060***	0.056***	0.050***		0.041**	0.062***
	(0.014)	(0.014)	(0.014)		(0.014)	(0.014)
Parent/s some PSE * Indigenous	-0.016	-0.033	-0.04		-0.037	-0.072*
	(0.031)	(0.032)	(0.032)		(0.032)	(0.031)
Parent/s BA+	0.235***	0.226***	0.214***		0.194***	0.186***
	(0.014)	(0.014)	(0.014)		(0.014)	(0.014)
Parent/s BA+ * Indigenous	-0.095**	-0.126***	-0.135***		-0.129***	-0.140***
	(0.034)	(0.036)	(0.036)		(0.036)	(0.036)
Income (for those living with parent/s)						
Parental income ($100,000)		0.008***	0.021***	0.043***	0.025***	0.014***
		(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Parental income * Indigenous		0.032**	0.057***	0.051***	0.063***	0.058***
		(0.012)	(0.016)	(0.015)	(0.016)	(0.016)
Parental income ($100,000) squared			-0.000***	-0.001***	-0.000***	-0.000***
			(0.000)	(0.000)	(0.000)	(0.000)
Parental income^2 * Indigenous			-0.006***	-0.007***	-0.006***	-0.005***
			(0.002)	(0.002)	(0.002)	(0.002)
Age Dummies	No	No	No	No	Yes	Yes
School Dummies	No	No	No	No	No	Yes
R2	0.048	0.049	0.05	0.023	0.062	0.174

Note: own calculations from BCK12/Census 2016; standard errors in parentheses; * $p<0.05$, ** $p<0.01$, *** $p<0.001$

Table 8 Grade 4 Reading standardized test scores and parental characteristics, girls

	1	2	3	4	5	6
Base groups						
Constant (omitted ed category: no HS)	0.572***	0.567***	0.560***	0.699***	0.635***	0.802***
	(0.010)	(0.011)	(0.011)	(0.004)	(0.119)	(0.156)
Ever identified as Aboriginal (BCK12)	-0.04	-0.050*	-0.044*	-0.131***	-0.061**	-0.037
	(0.022)	(0.022)	(0.022)	(0.012)	(0.022)	(0.023)
Not living at home (no parental education or income information)						
Not at Home	0.066***	0.071***	0.078***	-0.061***	0.129***	0.102***
	(0.016)	(0.016)	(0.016)	(0.012)	(0.016)	(0.016)
Not at Home * Indigenous	-0.013	-0.004	-0.009	0.078**	-0.02	0.003
	(0.031)	(0.032)	(0.032)	(0.026)	(0.032)	(0.032)
Parental Education						
Parent/s HS	0.081***	0.078***	0.075***		0.071***	0.064***
	(0.012)	(0.012)	(0.012)		(0.012)	(0.012)
Parent/s HS * Indigenous	-0.01	-0.02	-0.017		-0.021	-0.024
	(0.026)	(0.026)	(0.026)		(0.026)	(0.026)
Parent/s some PSE	0.124***	0.120***	0.114***		0.107***	0.098***
	(0.011)	(0.011)	(0.011)		(0.011)	(0.011)
Parent/s some PSE * Indigenous	-0.029	-0.043	-0.039		-0.034	-0.038
	(0.024)	(0.024)	(0.024)		(0.024)	(0.024)
Parent/s BA+	0.279***	0.271***	0.260***		0.240***	0.213***
	(0.011)	(0.011)	(0.011)		(0.011)	(0.011)
Parent/s BA+ * Indigenous	-0.054*	-0.078**	-0.069*		-0.065*	-0.062*
	(0.026)	(0.027)	(0.028)		(0.028)	(0.028)
Income (for those living with parent/s)						
Parental income ($100,000)		0.007***	0.020***	0.043***	0.025***	0.012***
		(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Parental income * Indigenous		0.027***	0.019	0.037**	0.029*	0.032*
		(0.008)	(0.013)	(0.013)	(0.013)	(0.014)
Parental income ($100,000) squared			-0.000***	-0.001***	-0.000***	-0.000***
			(0.000)	(0.000)	(0.000)	(0.000)
Parental income^2 * Indigenous			-0.001	-0.003*	-0.001	-0.001
			(0.001)	(0.001)	(0.001)	(0.002)
Age Dummies	No	No	No	No	Yes	Yes
School Dummies	No	No	No	No	No	Yes
R2	0.055	0.056	0.058	0.021	0.078	0.152

Note: own calculations from BCK12/Census 2021; standard errors in parentheses; * $p<0.05$, ** $p<0.01$, *** $p<0.001$

Table 9 Grade 4 Numeracy standardized test scores and parental characteristics, boys

	1	2	3	4	5	6
Base groups						
Constant (omitted ed category: no HS)	0.676***	0.668***	0.665***	0.764***	1.122***	0.418
	(0.014)	(0.014)	(0.014)	(0.004)	(0.278)	(0.249)
Ever identified as Aboriginal (BCK12)	-0.100***	-0.128***	-0.139***	-0.238***	-0.148***	-0.073*
	(0.029)	(0.029)	(0.030)	(0.015)	(0.030)	(0.030)
Not living at home (no parental education or income information)						
Not at Home	-0.100***	-0.128***	-0.139***	-0.238***	-0.148***	-0.073*
	(0.029)	(0.029)	(0.030)	(0.015)	(0.030)	(0.030)
Not at Home * Indigenous	0.017	0.029	0.03	0.084**	0.029	0.047
	(0.033)	(0.034)	(0.034)	(0.027)	(0.034)	(0.035)
Parental Education						
Parent/s HS	0.043**	0.040**	0.039*		0.033*	0.037*
	(0.015)	(0.015)	(0.015)		(0.015)	(0.015)
Parent/s HS * Indigenous	-0.024	-0.039	-0.043		-0.045	-0.052
	(0.034)	(0.034)	(0.034)		(0.034)	(0.033)
Parent/s some PSE	0.059***	0.053***	0.050***		0.042**	0.051***
	(0.014)	(0.014)	(0.014)		(0.014)	(0.014)
Parent/s some PSE * Indigenous	-0.015	-0.04	-0.045		-0.043	-0.064*
	(0.031)	(0.031)	(0.032)		(0.032)	(0.031)
Parent/s BA+	0.241***	0.229***	0.223***		0.209***	0.184***
	(0.014)	(0.014)	(0.014)		(0.014)	(0.015)
Parent/s BA+ * Indigenous	-0.081*	-0.130***	-0.137***		-0.135***	-0.122***
	(0.034)	(0.036)	(0.036)		(0.036)	(0.036)
Income (for those living with parent/s)						
Parental income ($100,000)		0.012***	0.017***	0.037***	0.020***	0.010***
		(0.002)	(0.002)	(0.003)	(0.002)	(0.002)
Parental income * Indigenous		0.059***	0.090***	0.095***	0.095***	0.079***
		(0.013)	(0.018)	(0.017)	(0.018)	(0.018)
Parental income ($100,000) squared			-0.000**	-0.000***	-0.000***	-0.000*
			(0.000)	(0.000)	(0.000)	(0.000)
Parental income^2 * Indigenous			-0.009**	-0.010***	-0.010***	-0.008**
			(0.003)	(0.003)	(0.003)	(0.003)
Age Dummies	No	No	No	No	Yes	Yes
School Dummies	No	No	No	No	No	Yes
R2	0.048	0.05	0.051	0.022	0.058	0.169

Note: own calculations from BCK12/Census 2016; standard errors in parentheses; * $p<0.05$, ** $p<0.01$, *** $p<0.001$

Table 10 Grade 4 Reading standardized test scores and parental characteristics, boys

	1	2	3	4	5	6
Base groups						
Constant (omitted ed category: no HS)	0.556***	0.551***	0.548***	0.653***	0.551***	-0.065
	(0.011)	(0.011)	(0.011)	(0.003)	(0.141)	(0.143)
Ever identified as Aboriginal (BCK12)	-0.068**	-0.070**	-0.073**	-0.125***	-0.089***	-0.076**
	(0.023)	(0.023)	(0.023)	(0.014)	(0.023)	(0.024)
Not living at home (no parental education or income information)						
Not at Home	0.060***	0.065***	0.068***	-0.037**	0.106***	0.088***
	(0.018)	(0.018)	(0.018)	(0.014)	(0.018)	(0.018)
Not at Home * Indigenous	-0.036	-0.034	-0.031	0.02	-0.038	-0.017
	(0.034)	(0.034)	(0.034)	(0.028)	(0.034)	(0.035)
Parental Education						
Parent/s HS	0.039**	0.036**	0.035**		0.029*	0.024
	(0.012)	(0.012)	(0.012)		(0.012)	(0.012)
Parent/s HS * Indigenous	0.033	0.03	0.029		0.032	0.036
	(0.027)	(0.027)	(0.027)		(0.027)	(0.027)
Parent/s some PSE	0.084***	0.079***	0.077***		0.067***	0.060***
	(0.012)	(0.012)	(0.012)		(0.012)	(0.012)
Parent/s some PSE * Indigenous	0	-0.003	-0.004		0.002	0.001
	(0.025)	(0.026)	(0.026)		(0.025)	(0.026)
Parent/s BA+	0.220***	0.210***	0.206***		0.189***	0.162***
	(0.011)	(0.012)	(0.012)		(0.012)	(0.012)
Parent/s BA+ * Indigenous	-0.033	-0.038	-0.039		-0.032	-0.018
	(0.027)	(0.029)	(0.030)		(0.029)	(0.029)
Income (for those living with parent/s)						
Parental income ($100,000)		0.009***	0.013***	0.030***	0.016***	0.009***
		(0.001)	(0.002)	(0.002)	(0.002)	(0.002)
Parental income * Indigenous		0.008	0.018	0.038*	0.025	0.032
		(0.011)	(0.017)	(0.017)	(0.017)	(0.019)
Parental income ($100,000) squared			-0.000***	-0.000***	-0.000***	-0.000***
			(0.000)	(0.000)	(0.000)	(0.000)
Parental income^2 * Indigenous			-0.003	-0.006	-0.005	-0.006
			(0.004)	(0.004)	(0.004)	(0.005)
Age Dummies	No	No	No	No	Yes	Yes
School Dummies	No	No	No	No	No	Yes
R2	0.045	0.047	0.047	0.016	0.059	0.144

Note: own calculations from BCK12/Census 2016; standard errors in parentheses; * p<0.05, ** p<0.01, *** p<0.001

6. Conclusion

This paper shows that for cohorts currently of working age, Indigenous people in Canada have seen distinctly different patterns of intergenerational education transmission than have non-Indigenous Canadians. Along with lower overall educational attainment, there has also been much lower intergenerational persistence of education. Section 4 shows that the adult children of university-educated Indigenous people in Canada are much more likely to drop out of high school and much less likely to themselves complete university than are the adult children of university-educated non-Indigenous people. If those transmission patterns remain unchanged, the gap in education levels between Indigenous and non-Indigenous people in Canada would diverge rather than converge. Section 5 shows evidence that a similar pattern holds in the school system in the Canadian province of British Columbia, with larger gaps between the standardized test scores of Indigenous and non-Indigenous students among the most educated parents.

These estimates cannot be thought of as causal effects of parental education on children's own education. However, the results do suggest it is unwise to assume that there are similar intergenerational education transmission dynamics at work in different parts of the Canadian population. It is also difficult to draw out from this study the reasons for the differences in the correlation between parents' and children's education levels. Indigenous people in Canada face a somewhat different educational system, particularly outside urban areas; have on average larger family sizes; and may have particular cultural issues with post-secondary education systems. Parental income, family size, distance to post-secondary institutions when growing up are all likely to contribute independently from parental education.

Given the differences in intergenerational education transmission patterns, government policies designed to raise Indigenous education outcomes that are based on an understanding of non-Indigenous family education dynamics may not be effective. That Indigenous people who have parents with a university degree have been less likely to themselves graduate from university or college suggests either that finances don't matter as much among Indigenous

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groups – which is at odds with the finding that income matters more for Indigenous than non-Indigenous students' test scores – or that the learning effect / first generations issue is not as salient for the Indigenous population. Given that much of the result appears to hinge on the university-university transitions, it could also suggest that universities are not welcoming environments for Indigenous students, and that specific programs targeting Indigenous populations other than or alongside financial aid programs may be necessary to increase enrolments and reduce the gaps between education levels of Indigenous people in Canada and the rest of the population. A program that focuses only on improving educational outcomes for children from families with low education levels, say, will not in itself necessarily lead to a closing of the gap between education levels of Indigenous and non-Indigenous people. If increasing education levels among Indigenous people is an important goal of policy, then policy solutions that consider heterogeneous transmission mechanisms across different groups of the population – and that result in what Butaeva et al. (2025) call structural mobility – are likely needed.

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8. Appendix Tables

Table A11 Transmission Matrices by Sex, GSS

		Aboriginal					Non-Aboriginal				
	Child's education:	1	2	3	4	5	1	2	3	4	5
	Highest Parental Education:										
Child's sex:											
Male:	1	0.259	0.327	0.166	0.147	0.101	0.554	0.250	0.109	0.061	0.026
	2	0.175	0.405	0.286	0.078	0.056	0.304	0.431	0.113	0.103	0.049
	3	0.058	0.269	0.441	0.048	0.184	0.299	0.312	0.233	0.104	0.051
	4	0.091	0.324	0.171	0.181	0.232	0.251	0.363	0.151	0.157	0.079
	5	0.101	0.281	0.160	0.199	0.258	0.171	0.337	0.126	0.189	0.177
Female:	1	0.311	0.293	0.130	0.104	0.162	0.601	0.241	0.097	0.047	0.013
	2	0.148	0.426	0.215	0.114	0.097	0.346	0.427	0.127	0.073	0.027
	3	0.100	0.415	0.219	0.090	0.175	0.338	0.343	0.177	0.105	0.038
	4	0.184	0.365	0.149	0.199	0.102	0.265	0.368	0.147	0.175	0.045
	5	0.135	0.352	0.157	0.151	0.206	0.157	0.368	0.131	0.212	0.132

Note: The table shows the percentage of individuals who have the education level indicated in the columns, conditional on having a parent or parents with at least the education level identified in the rows. The education levels are: (1) at least one parent has a university degree; (2) at least one parent has a college degree or diploma (but neither has a university degree); (3) at least one parent has some post-secondary education (but neither has graduated from a university or college); (4) at least one parent has a high school diploma (but neither has further education); and (5) neither parent has a high school diploma.
Source: Statistics Canada (various years): General Social Survey, waves 2006, 2008, 2009, 2010.

Table A12 Estimates of Linear Probability Model estimates of the relationship between parental and children's education outcome separately for Indigenous and non-Indigenous people, GSS

	Prob graduate university		graduate from some post-secon		Prob fail to grad HS	
	Non-Indigenous	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous	Indigenous
Constant	0.021	0.028	0.45	0.19	0.262	0.322
	(0.019)	(0.063)	(0.020)**	(0.091)*	(0.011)**	(0.071)**
Parent/s education (base = no high school)						
High school diploma	0.097	0.006	0.102	0.059	-0.081	-0.035
	(0.007)**	(0.024)	(0.007)**	(0.035)	(0.004)**	(0.027)
Some uni/college	0.15	-0.044	0.114	-0.007	-0.101	-0.044
	(0.012)**	(0.047)	(0.013)**	(0.068)	(0.007)**	(0.053)
Dip/cert from community college	0.16	0.016	0.221	0.133	-0.104	-0.122
	(0.008)**	(0.032)	(0.009)**	(0.046)**	(0.005)**	(0.036)**
BA or above	0.404	0.153	0.286	0.164	-0.120	-0.059
	(0.008)**	(0.034)**	(0.008)**	(0.049)**	(0.005)**	(0.038)
Observations	29532	1334	29579	1341	29532	1334
R-squared	0.12	0.05	0.07	0.05	0.05	0.05

Note: except where indicated, the sample is all individuals aged 30-59 in one of the GSS waves who are born in Canada and have information on parental education, age group, sex, province of birth, and current location of residence. Estimates are from a linear probability model, weighted using sample weights. All regressions include controls for age group, sex, province of birth, current location of residence, and the year of the survey.

Table A13 Linear Probability Model estimates of the relationship between parental and children's education outcomes by age group, GSS

	Graduated university			Graduated post-secondary			Did not graduate high school		
	30-39	40-49	50-59	30-39	40-49	50-59	30-39	40-49	50-59
Constant	-0.074	0.007	0.14	0.389	0.372	0.489	0.233	0.275	0.306
	(0.033)*	(0.029)	(0.028)**	(0.033)**	(0.032)**	(0.032)**	(0.018)**	(0.019)**	(0.020)**
Parent/s education (base = no high school)									
High school diploma	0.13	0.08	0.093	0.094	0.096	0.106	-0.078	-0.070	-0.095
	(0.014)**	(0.011)**	(0.010)**	(0.014)**	(0.012)**	(0.012)**	(0.007)**	(0.007)**	(0.007)**
Some university/community college	0.132	0.207	0.125	0.077	0.142	0.121	-0.127	-0.080	-0.088
	(0.021)**	(0.020)**	(0.020)**	(0.021)**	(0.022)**	(0.023)**	(0.011)**	(0.013)**	(0.015)**
Diploma/certificate from community colleg	0.166	0.175	0.146	0.2	0.227	0.226	-0.117	-0.090	-0.096
	(0.015)**	(0.014)**	(0.015)**	(0.015)**	(0.015)**	(0.018)**	(0.008)**	(0.009)**	(0.011)**
Doctorate/masters/bachelor's degree	0.433	0.381	0.407	0.273	0.268	0.317	-0.124	-0.103	-0.135
	(0.014)**	(0.013)**	(0.013)**	(0.014)**	(0.014)**	(0.015)**	(0.008)**	(0.008)**	(0.009)**
Aboriginal interacted by:									
Constant	-0.035	-0.029	-0.008	-0.099	-0.1	-0.02	0.055	0.046	0.132
	(0.043)	(0.029)	(0.027)	(0.043)*	(0.032)**	(0.031)	(0.023)*	(0.019)*	(0.019)**
High school diploma	-0.089	-0.053	-0.147	-0.070	-0.001	-0.101	0.054	0.063	-0.027
	(0.061)	(0.051)	(0.056)**	(0.061)	(0.057)	(0.065)	(0.032)	(0.033)	(0.041)
Some university/community college	-0.178	-0.146	-0.195	-0.156	-0.114	-0.052	0.044	0.105	0.062
	(0.096)	(0.120)	(0.124)	(0.096)	(0.134)	(0.144)	(0.051)	(0.077)	(0.091)
Diploma/certificate from community colleg	-0.132	-0.156	-0.112	-0.143	-0.080	0.078	-0.014	0.051	-0.196
	(0.069)	(0.073)*	(0.089)	(0.069)*	(0.081)	(0.103)	(0.036)	(0.047)	(0.065)**
Doctorate/masters/bachelor's degree	-0.252	-0.192	-0.43	-0.127	-0.107	-0.167	0.056	0.095	-0.065
	(0.070)**	(0.074)**	(0.121)**	(0.069)	(0.083)	(0.140)	(0.037)	(0.048)*	(0.089)
Observations	9418	10570	10878	9432	10586	10902	9418	10570	10878
R-squared	0.13	0.12	0.11	0.08	0.07	0.06	0.06	0.05	0.06

Note: except where indicated, the sample is all individuals aged 30-59 in one of the GSS waves who are born in Canada and have information on parental education, age group, sex, province of birth, and current location of residence. Estimates are from a linear probability model, weighted using sample weights. All regressions include controls for age group, sex, province of birth, current location of residence, and the year of the survey.

Table A14 Grade 7 Numeracy standardized test scores and parental characteristics, girls

	1	2	3	4	5	6
Base groups						
Constant (omitted ed category: no HS)	0.628***	0.623***	0.613***	0.673***	0.402***	0.17
	(0.015)	(0.015)	(0.015)	(0.005)	(0.098)	(0.174)
Ever identified as Aboriginal (BCK12)	-0.223***	-0.234***	-0.233***	-0.224***	-0.229***	-0.152***
	(0.034)	(0.034)	(0.035)	(0.019)	(0.035)	(0.037)
Not living at home (no parental education or income information)						
Not at Home	0.02	0.026	0.035	-0.025	-0.007	0.023
	(0.023)	(0.023)	(0.023)	(0.018)	(0.023)	(0.024)
Not at Home * Indigenous	0.097*	0.107*	0.107*	0.098**	0.125**	0.09
	(0.046)	(0.047)	(0.047)	(0.037)	(0.047)	(0.049)
Parental Education						
Parent/s HS	0.018	0.016	0.013		0.015	0.027
	(0.017)	(0.017)	(0.017)		(0.017)	(0.017)
Parent/s HS * Indigenous	0.086*	0.072	0.069		0.069	0.044
	(0.040)	(0.040)	(0.041)		(0.041)	(0.042)
Parent/s some PSE	0.019	0.014	0.008		0.012	0.040*
	(0.016)	(0.016)	(0.016)		(0.016)	(0.016)
Parent/s some PSE * Indigenous	0.097**	0.080*	0.078*		0.077*	0.043
	(0.036)	(0.037)	(0.037)		(0.037)	(0.039)
Parent/s BA+	0.200***	0.191***	0.178***		0.185***	0.175***
	(0.016)	(0.016)	(0.016)		(0.016)	(0.016)
Parent/s BA+ * Indigenous	-0.01	-0.039	-0.039		-0.041	-0.053
	(0.040)	(0.043)	(0.043)		(0.043)	(0.045)
Income (for those living with parent/s)						
Parental income ($100,000)		0.008***	0.022***	0.041***	0.021***	0.013***
		(0.002)	(0.003)	(0.003)	(0.003)	(0.003)
Parental income * Indigenous		**0.028**	0.035	0.04	0.035	0.041*
		(0.015)	(0.022)	(0.020)	(0.022)	(0.020)
Parental income ($100,000) squared			-0.000***	-0.001***	-0.000***	-0.000***
			(0.000)	(0.000)	(0.000)	(0.000)
Parental income^2 * Indigenous			-0.003	-0.004	-0.003	-0.004
			(0.003)	(0.003)	(0.003)	(0.003)
Age Dummies	No	No	No	No	Yes	Yes
School Dummies	No	No	No	No	No	Yes
R2	0.048	0.049	0.051	0.023	0.058	0.186

Note: own calculations from BCK12/Census 2016; standard errors in parentheses; * p<0.05, ** p<0.01, *** p<0.001

Table A15 Grade 7 Reading standardized test scores and parental characteristics, girls

	1	2	3	4	5	6
Base groups						
Constant (omitted ed category: no HS)	0.625***	0.618***	0.611***	0.712***	0.504***	0.482**
	(0.011)	(0.011)	(0.011)	(0.004)	(0.128)	(0.154)
Ever identified as Aboriginal (BCK12)	-0.123***	-0.135***	-0.136***	-0.190***	-0.128***	-0.103***
	(0.024)	(0.024)	(0.024)	(0.013)	(0.024)	(0.026)
Not living at home (no parental education or income information)						
Not at Home	0.093***	0.100***	0.107***	0.006	0.085***	0.053**
	(0.017)	(0.017)	(0.017)	(0.013)	(0.017)	(0.018)
Not at Home * Indigenous	0.017	0.029	0.03	0.084**	0.029	0.047
	(0.033)	(0.034)	(0.034)	(0.027)	(0.034)	(0.035)
Parental Education						
Parent/s HS	0.048***	0.045***	0.041**		0.042***	0.030*
	(0.013)	(0.013)	(0.013)		(0.013)	(0.013)
Parent/s HS * Indigenous	0.016	0.002	0		-0.001	-0.015
	(0.028)	(0.028)	(0.028)		(0.028)	(0.029)
Parent/s some PSE	0.082***	0.076***	0.070***		0.073***	0.056***
	(0.012)	(0.012)	(0.012)		(0.012)	(0.012)
Parent/s some PSE * Indigenous	0.024	0.004	0.002		0	-0.006
	(0.026)	(0.026)	(0.027)		(0.026)	(0.027)
Parent/s BA+	0.254***	0.242***	0.231***		0.239***	0.201***
	(0.012)	(0.012)	(0.012)		(0.012)	(0.013)
Parent/s BA+ * Indigenous	-0.002	-0.034	-0.035		-0.039	-0.036
	(0.029)	(0.031)	(0.031)		(0.031)	(0.032)
Income (for those living with parent/s)						
Parental income ($100,000)		0.010***	0.022***	0.045***	0.021***	0.010***
		(0.002)	(0.002)	(0.003)	(0.002)	(0.002)
Parental income * Indigenous		**0.033***	0.044**	0.060***	0.041**	0.047**
		(0.010)	(0.015)	(0.014)	(0.015)	(0.015)
Parental income ($100,000) squared			-0.000***	-0.001***	-0.000***	-0.000***
			(0.000)	(0.000)	(0.000)	(0.000)
Parental income^2 * Indigenous			-0.003	-0.006**	-0.003	-0.004*
			(0.002)	(0.002)	(0.002)	(0.002)
Age Dummies	No	No	No	No	Yes	Yes
School Dummies	No	No	No	No	No	Yes
R2	0.064	0.066	0.067	0.028	0.076	0.156

Note: own calculations from BCK12/Census 2016; standard errors in parentheses; * p<0.05, ** p<0.01, *** p<0.001

Table A16 Grade 7 Numeracy standardized test scores and parental characteristics, boys

	1	2	3	4	5	6
Base groups						
Constant (omitted ed category: no HS)	0.680***	0.671***	0.665***	0.714***	0.274***	-0.572***
	(0.015)	(0.015)	(0.015)	(0.005)	(0.050)	(0.088)
Ever identified as Aboriginal (BCK12)	-0.198***	-0.214***	-0.222***	-0.256***	-0.222***	-0.124**
	(0.035)	(0.036)	(0.036)	(0.021)	(0.036)	(0.038)
Not living at home (no parental education or income information)						
Not at Home	0.039	0.049*	0.055*	0.005	0.007	0.035
	(0.024)	(0.024)	(0.024)	(0.019)	(0.024)	(0.025)
Not at Home * Indigenous	-0.018	-0.002	0.006	0.041	0.03	-0.037
	(0.049)	(0.050)	(0.050)	(0.041)	(0.050)	(0.053)
Parental Education						
Parent/s HS	-0.017	-0.021	-0.023		-0.022	-0.001
	(0.017)	(0.017)	(0.017)		(0.017)	(0.017)
Parent/s HS * Indigenous	0.037	0.024	0.019		0.023	-0.004
	(0.041)	(0.041)	(0.041)		(0.041)	(0.042)
Parent/s some PSE	0.005	-0.003	-0.007		-0.006	0.025
	(0.016)	(0.016)	(0.016)		(0.016)	(0.016)
Parent/s some PSE * Indigenous	0.054	0.036	0.031		0.035	-0.013
	(0.037)	(0.038)	(0.038)		(0.038)	(0.039)
Parent/s BA+	0.205***	0.190***	0.182***		0.186***	0.176***
	(0.016)	(0.016)	(0.016)		(0.016)	(0.016)
Parent/s BA+ * Indigenous	0.002	-0.028	-0.032		-0.03	-0.047
	(0.041)	(0.044)	(0.044)		(0.043)	(0.044)
Income (for those living with parent/s)						
Parental income ($100,000)		0.014***	0.023***	0.043***	0.022***	0.014***
		(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Parental income * Indigenous		0.037*	0.062*	0.077**	0.060*	0.059*
		(0.017)	(0.027)	(0.026)	(0.026)	(0.025)
Parental income ($100,000) squared			-0.000***	-0.000***	-0.000***	-0.000***
			(0.000)	(0.000)	(0.000)	(0.000)
Parental income^2 * Indigenous			-0.007	-0.01	-0.007	-0.006
			(0.006)	(0.006)	(0.006)	(0.006)
Age Dummies	No	No	No	No	Yes	Yes
School Dummies	No	No	No	No	No	Yes
R2	0.057	0.06	0.06	0.026	0.069	0.187

Note: own calculations from BCK12/Census 2016; standard errors in parentheses; * p<0.05, ** p<0.01, *** p<0.001

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Table A17 Grade 7 Reading standardized test scores and parental characteristics, boys

	1	2	3	4	5	6
Base groups						
Constant (omitted ed category: no HS)	0.562***	0.554***	0.549***	0.653***	0.532***	0.002
	(0.011)	(0.011)	(0.011)	(0.004)	(0.032)	(0.084)
Ever identified as Aboriginal (BCK12)	-0.105***	-0.114***	-0.120***	-0.165***	-0.112***	-0.070**
	(0.025)	(0.025)	(0.026)	(0.014)	(0.025)	(0.027)
Not living at home (no parental education or income information)						
Not at Home	0.109***	0.117***	0.123***	0.019	0.105***	0.099***
	(0.018)	(0.018)	(0.018)	(0.015)	(0.018)	(0.019)
Not at Home * Indigenous	-0.03	-0.022	-0.016	0.029	-0.015	-0.039
	(0.036)	(0.036)	(0.037)	(0.030)	(0.037)	(0.039)
Parental Education						
Parent/s HS	0.042***	0.039**	0.036**		0.037**	0.036**
	(0.013)	(0.013)	(0.013)		(0.012)	(0.013)
Parent/s HS * Indigenous	0.021	0.016	0.013		0.011	-0.01
	(0.029)	(0.029)	(0.030)		(0.029)	(0.031)
Parent/s some PSE	0.087***	0.080***	0.076***		0.079***	0.074***
	(0.012)	(0.012)	(0.012)		(0.012)	(0.012)
Parent/s some PSE * Indigenous	0.018	0.011	0.009		0.007	-0.015
	(0.027)	(0.027)	(0.027)		(0.027)	(0.028)
Parent/s BA+	0.237***	0.224***	0.215***		0.224***	0.196***
	(0.012)	(0.012)	(0.012)		(0.012)	(0.012)
Parent/s BA+ * Indigenous	-0.045	-0.058	-0.059		-0.062*	-0.070*
	(0.030)	(0.031)	(0.031)		(0.031)	(0.033)
Income (for those living with parent/s)						
Parental income ($100,000)		0.012***	0.021***	0.039***	0.019***	0.010***
		(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Parental income * Indigenous		0.02	0.040*	0.054***	0.036*	0.039*
		(0.010)	(0.016)	(0.015)	(0.015)	(0.016)
Parental income ($100,000) squared			-0.000***	-0.000***	-0.000***	-0.000**
			(0.000)	(0.000)	(0.000)	(0.000)
Parental income^2 * Indigenous			-0.007**	-0.009**	-0.006**	-0.006**
			(0.002)	(0.003)	(0.002)	(0.002)
Age Dummies	No	No	No	No	Yes	Yes
School Dummies	No	No	No	No	No	Yes
R2	0.056	0.059	0.06	0.025	0.068	0.15

Note: own calculations from BCK12/Census 2016; standard errors in parentheses; * $p<0.05$, ** $p<0.01$, *** $p<0.001$

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