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The Intergenerational Effects of Residential Schools on Children's Educational Experiences in Ontario and Canada's Western Provinces

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Abstract
The intergenerational effects of Canada's Indian Residential Schools have been widely discussed, but limited empirical work exists. I use the confidential wave of the 2001 Aboriginal Peoples Survey of Children and Youth (APSCY) to study the association between mothers' residential school attendance and their children's educational outcomes and experiences in Ontario, Manitoba, Saskatchewan, Alberta, and British Columbia. Holding a number of factors constant, I demonstrate that children whose mothers attended residential school are more likely to be suspended or expelled and have worse school experiences on average than children whose mothers did not. Children are also more likely to live off reserve and less likely to speak an Aboriginal language if their mothers attended a residential school. I also examine some contextual factors that may influence the relationship between mothers' residential school attendance and their children's educational outcomes. These findings suggest that dealing with the intergenerational legacy of residential schools is necessary for improving the educational outcomes of today's Aboriginal youth.

Keywords
education, intergenerational, residential schools, Indigenous peoples, Canada

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> [Residential schools'] impact has been transmitted from grandparents to parents to children. This legacy from one generation to the next has contributed to social problems, poor health, and low educational success rates in Aboriginal communities today. (Truth and Reconciliation Commission of Canada [TRC], 2012, p. 1)

Throughout the twentieth century, Registered Indian children in Canada were compelled to leave their homes to attend assimilative boarding schools known as Indian Residential Schools. The mistreatment of children within these schools has induced a national apology (Harper, 2008) and resulted in the largest class action settlement in Canadian history (Reimer, 2010; TRC, 2015). Residential schooling's historical prevalence and relatively recent end implies that thousands of modern Aboriginal youth in Canada are potentially affected by the intergenerational consequences of these schools. While many authors suggest that Aboriginal youths' current educational struggles are part of the intergenerational fall-out from residential schools,[1] few authors have explored this possibility statistically. Using the confidential wave of the 2001 Aboriginal Peoples Survey of Children and Youth (APSCY), I examine the intergenerational correlations between Aboriginal mother's residential school attendance and their children's current school experiences.

The TRC[2] identified the educational differences between Aboriginal and non-Aboriginal people as a necessary area of research in order to heal the legacy of residential schools (TRC, 2015). Results from the 2006 Census suggested that those between the ages of 20 and 24 who identified as North American Indian (or more commonly First Nations) had a high school graduation rate of 50 percent, while other Canadians had a graduation rate of 90 percent (Richards, Hove, & Afolabi, 2008). These educational differences are substantially correlated with later life employment and earnings (Feir, 2013; George & Kuhn, 1994; Sharpe, Arsenault, Lapointe, & Cowan, 2009). Understanding the legacy of residential schools in generating this educational divide is necessary to move forward in reconciliation and Aboriginal economic inclusion (TRC, 2015).

An empirical literature on the educational legacy of residential schools has emerged with the work of Bougie and Senécal (2010) and O'Gorman and Pandey (2015). While neither paper focuses on residential schooling as the main independent variable of interest, both sets of authors find that a family member attending residential school is correlated with poorer educational outcomes. Bougie and Senécal (2010) focused on off-reserve Registered Indian children and find a negative association between parental residential school attendance and parental perceptions of how well their child is doing in school. O'Gorman and Pandey (2015) focused on the probability of high school graduation in northern Aboriginal communities and found a negative association between the probability of graduating from high school and having a family member who attended a residential school. I make three contributions to this literature.

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[1] See Haig-Brown (1988), Deiter (1999), Aboriginal Healing Foundation (2002), Smith, Varcoe, and Edwards (2005), Chrisjohn, Young, and Maraun (2006), Barnes, Josefowitz, and Cole (2005), Stonefish (2007), Smith (2009), Richards and Scott (2009), Gauthier (2010), and the TRC (2012, 2015).

[2] The TRC was created as part of the Indian Residential Schools Settlement Agreement and their mandate was to compile as complete as possible documentation of the history and legacy of residential schools.

First, I examine the correlation of mother's residential school attendance with four additional educational outcomes:

a. Expulsion or suspension,

b. Repeating a grade,

c. Winning an award for grades, and

d. Winning an award for other activities.

I also examine two child attitude and experience indicators: how well children get along with their teachers and how often they look forward to going to school. While these outcomes likely have a complicated relationship with academic performance, suspension and expulsion, grade repetition, and poor school experiences at an early age are important predictors of dropping out of high school (De Witte, Cabus, Thyssen, Groot, & van den Brink, 2013; Tobin & Sugai, 1999) and are significantly correlated with other educational outcomes (Abu-Hial, 2000; Ford & Harris, 1996; Marks, 1998). The fact that residential schooling is correlated with these extreme early educational outcomes and negative school experiences suggests that the intergenerational impacts of residential school extend further than the poorer academic performance found by Bougie and Senécal (2010) and could partly explain O'Gorman and Pandey's (2015) findings.

Second, I expand on previous literature by including a selected sample of children who live on reserve. I do this using the confidential wave of the 2001 APSCY. While there are possible limitations to the generalizability of the findings of the on-reserve sample, I argue that the inclusion of this population can potentially provide important insight into the intergenerational effects of residential schools. Specifically, the inclusion of the on-reserve population allows me to show that mothers' residential school attendance is associated with being less likely to reside on reserve in adulthood, conditional on a set of observable factors. Conditional on these same factors, I also demonstrate that children of mothers who attended a residential school are less likely to be able to speak or understand an Aboriginal language.

The fact that children are less likely to live on a reserve if their mothers attended a residential school implies that the children of residential school survivors are more likely to attend a provincial public school than children whose mothers did not, all else equal (Richards & Scott, 2009). Since Indigenous children often feel marginalized in provincial schools,[3] the correlation between mothers' residential school attendance and place of residence may imply the children of residential school survivors are more exposed to marginalization in school. This marginalization may be compounded by the fact that those who have family members who were affected by residential school are more negatively impacted by discrimination (Bombay, Matheson, & Anisman, 2014). These findings motivate me to test whether the intergenerational correlation between residential school attendance and educational experiences varies by where the child lives. While my estimates are imprecise, the point estimates suggest place of residence may be an important factor in the intergenerational effects of residential school.

[3] See Aman, (2009), Gunn, Pomahac, Stricker, and Tailfeathers (2011), McBride and McKee (2001), Silver, Mallet, Greene, and Simard (2002), Bell and Anderson (2004), and White, Maxim, and Spence (2004).

My final contribution is to examine whether the effect of a mother's residential school attendance depends on whether she had siblings who also attended residential school. Previous work has suggested that siblings can play an important protective role in traumatic or marginalized situations (Bank, 1992; Bank & Kahn, 1982; Dunn & Kendrick, 1982; Farver, 1993; Hetherington, 1989; Rutter, 1990; Sandler, 1980). Even if siblings were separated during residential school, having a sibling experiencing the same events may provide additional support relative to those who attended residential school alone (Avioli, 1989; Milevsky, 2005). If school experiences were significantly worse for those who did not have siblings attend residential school, then the negative consequences of residential school may be magnified for this group and for their children. I find evidence in favour of this hypothesis.

In the next section, I provide a brief history of residential schooling, focusing on the later era of the system. I then discuss the data and the methodology I use in this work and present the results. The last section summarizes my findings, re-emphasises the limitations, and suggests avenues for future research and possible policy responses.

A (Very) Brief History of Residential Schooling in Canada

It is estimated that at least 150,000 Aboriginal children in Canada attended residential schools between 1867 and 1996, with 80,000 former students still living as of 2012 (TRC, 2012). Residential schooling is still very much a salient aspect of the Aboriginal experience in Canada: As of 2001, nearly 50 percent of individuals who identify as North American Indian reported that at least one family member attended residential school (Statistics Canada, 2003a). As a consequence, understanding the intergenerational effects of residential schools is a necessary part of understanding the Aboriginal context in Canada. The discussion of residential schools often provokes strong negative reactions. Numerous authors have argued that the residential schooling system was an attempt by the federal government at cultural genocide (Assembly of First Nations [AFN], 2002; Chrisjohn et al., 2006; Hudson & MacDonald, 2012; TRC, 2015). However, the positive experiences of residential school survivors should also be acknowledged (TRC, 2015). Some academics have even argued that the residential schooling system generated an educated elite with a strong Aboriginal identity who spent their careers fighting for Aboriginal legal rights and cultural preservation (Glenn, 2011; Gresko, 1979; Miller, 1996; Szaz, 2006).

While the earliest residential schools existed in New France in the 1600s, they became more established after Confederation with missionary establishment and government funding. The number of children and the number of schools grew further after a 1920 revision to the Indian Act (Miller, 1996) requiring all children between the ages of 7 and 15 attend the closest school "of the kind required" (An Act to Amend the Indian Act, 1920, see Section A10(1)). This legislation resulted in many children being forcibly removed from their families and being taken extraordinary distances to attend a residential school. Some of these children did not see their families for years (Aboriginal Healing Foundation [AHF], 2002; McFarlane, 1999; Miller, 1996). The school system was described throughout its existence as strict and austere, and for a long period the curriculum included explicit cultural and religious training. Children were not permitted to speak their native language and, before 1951, manual labour by the students was used to fund the activities of the schools. The health conditions of the schools were substandard and in many cases appalling in the earlier years, and residential schools are now notorious for the abuses children suffered when attending (Assembly of First Nations, 2002; Milloy, 1999; Royal Commission on Aboriginal Peoples [RCAP], 1997).

However, there was significant change in the residential schooling system over its long lifetime. The average age of mothers who attended residential school in my sample suggests that they would have attended during the final era of the system—as early as the 1960s until approximately the mid-1980s. This period was significantly different from the early era of residential schools in many ways. For example, manual labour was legally mandated out of residential schools starting in 1951; increased health, nutrition, and treatment regulations mitigated the severity of conditions in the schools in 1957; and the religious organizations that ran the schools were entirely relieved of their official role in the system in 1969. The 1960s also saw the formation of residential school committees that allowed Aboriginal parents to be involved (Hawthorn, 1967). In addition, in the later years of residential schools, some children could engage in extracurricular activities such as brass bands, Cubs, Brownies, Scouts, Girl Guides, and Cadets (Miller, 2004; TRC, 2015). This engagement may have been difficult if the children had been attending a public school because of the possibly very long commutes between their communities and the school or more general feelings of marginalization (Government of Ontario, 1976; Hawthorn, 1967).

During public school integration, the residential schools were also beginning to be converted from schools to hostels to facilitate children's integration into the provincial school systems (Hawthorn, 1967; Milloy, 1999). By the late 1960s and early 1970s, the remaining residential schools primarily acted as hostels and schools for children whose home environments were deemed "unsuitable" (Milloy, 1999; Presbyterian Archives, 2010). In addition, the uprising at Blue Quills residential school in 1970 and the eventual transfer of the school to the First Nation marked a substantial change in Aboriginal education more generally (RCAP, 1997; National Indian Brotherhood, 1980). By the 1980s, only a dozen residential schools operated by either the federal government or First Nation governments were left in existence. The last government-run school closed in 1996, and the last band-run school in 1998. The outside options for schooling also changed. Rather than children attending residential school, an on-reserve day school, or nothing, children started to be integrated into public schools starting in the 1950s. At the time of integration, Aboriginal children faced numerous challenges in the public system such as the distance to the school, racism, and cultural and economic divides (Government of Ontario, 1976; Hawthorn, 1967; Miller, 2004; TRC, 2015).

Thus, given my sample, I examine the intergenerational effects of residential school for children whose mothers were exposed to a less harsh version of residential schools than in the past. However, there is still significant reason to think that residential schooling retained much of its abusive essence over this time period. Before the late 1960s, the official government view was that "Indians took no part in the processes of education," (Hawthorn, 1967), and many Aboriginal parents felt the advisory councils established in the 1960s were impotent and ineffective. In addition, many of the same employees who worked at the residential schools before the changes worked there afterwards, and some of the worst abuse cases documented were over this time period (Feir, 2015). Studies by the Cariboo Tribal Council and Nuu-Chah-Nulth Tribal Council in the early 1990s recounted stories of deprivation, neglect, and abuse (Cariboo Tribal Council, 1991; Nuu-Chah-Nulth Tribal Council, 1994). The 1991 Royal Commission on Aboriginal People (RCAP) concluded, after hearing professional historical testimony and speaking with former students, that despite department efforts to establish guidelines for punishment in federal schools, abusive treatment existed through the history of the system (RCAP, 1997). Thus, while I suspect the intergenerational effects of residential school may be less dramatic in

the group in my sample than in earlier generations, there is still substantial reason to think these schools significantly affected mothers.

Data and Methodology

Data Source

I use the confidential wave of the 2001 APSCY. The APSCY is a post-census survey whose target population was children under the age of 15 who were identified as either Métis, North American Indian, or Inuit by the head of household in the Canadian Long Form Census questionnaire. The Long Form Census was distributed to 20 percent of households off reserve, and 100 percent of the households on reserves that participated in the census. Some of the excluded reserves are quite large including, for example, the largest reserve in Canada, Six Nations 40 in Ontario with approximately 20,000 residents. Statistics Canada estimated the on-reserve population not included in the census was approximately 34,500 in 2001 with most of this missing population being in Ontario (Statistics Canada, 2006). Because of the high cost of sampling, the 2001 APSCY only surveyed 123 of the largest First Nations communities (reserves) that participated in the Census. In most provinces, these communities covered between 50 to 55 percent of the on-reserve population. However, of the communities included, the global response rate was quite high, 87.9 percent (Statistics Canada, 2003b). It is important to note that because the sampling strategy focused on larger reserves in each province, the information collected from these communities is not designed to be representative of the entire on-reserve population. These limitations should be kept in mind when considering the findings here.

The APSCY includes a rich set of demographic, health, and educational information. The questions about the child were asked of the person "most knowledgeable" (Statistics Canada, 2003b). Overwhelmingly, the individual who knew the child the best was the birth mother (approximately 80 percent of the total sample, after excluding missing observations). The APSCY has a limited set of information about individuals in the child's household including the number of individuals in the household, whether the child belongs to a two-parent family, the education level of the person who knows the child best, and the child's paternal and maternal ancestral origins. Uniquely, the survey also includes information on the residential schooling status of the individual who knew the child best as well as that individual's siblings' residential school status.

Target Population

I restricted the sample to individuals whose birth mother was "the respondent who knows the child best" in order to have a clear understanding of the effects I am estimating.[4] I also restrict the sample of children to those living outside of the Atlantic Provinces, Quebec, and the Territories, because these areas had much different levels of exposure to residential schooling than the rest of Canada.[5] Finally, I restrict the sample of children to those between the ages of 7 and 14 at the time of the survey since I am

[4] In the other cases, the respondent was predominately a female family member such as grandmother or a foster parent and the results are qualitatively similar if I include these children in the sample.
[5] The federal government only started to provide education to the Inuit beginning in 1955 and the residential schools in these regions of the country acted only as hostels (King, 2006). In addition, only one residential school was opened in the Atlantic Provinces and it was predominately an orphanage (Milloy, 1999).

interested in schooling outcomes. I also limit the sample to individuals who do not have missing information for any of the dependent or key independent variables of interest. This reduces the sample significantly. I discuss how below.

Dependent Variables: School Experiences

I used several measures of students' schooling experiences.[6] I use questions on whether the child had ever been suspended or expelled where the respondent can answer "yes," "no," or "don't know" ("don't know" answers are counted as missing). I aggregated these responses to construct an indicator variable equal to 1 if the child was suspended or expelled and zero otherwise. Similar questions ask whether a child has ever repeated a grade, has ever received an award in school for their grades or hard work, and whether he or she has ever received an award for another reason (for attendance or participation in sports, for example).

Generally, children of mothers who attended residential school seem to perform worse along these schooling dimensions than children whose mothers did not. Children whose mothers attended residential school are more likely to have reported repeating a grade by approximately 6 percentage points and being suspended or expelled by 5 percentage points. Children whose mothers attended residential school are half as likely to win awards for their grades.

The two other questions I use to measure children's school experiences are (a) how often they look forward to going to school, and (b) how well they get along with their teachers. The categories for how often the child looks forward to going to school are "almost never" and "rarely" (11 percent of the sample of children whose mothers did attend residential school and 6 percent for those whose mothers who did not attend residential school), "sometimes" (approximately 13 percent for both samples), "often" (15 percent of the sample of children whose mothers did attend residential school and 18 percent for those whose mothers who did not attend residential school), and "almost always" (approximately 63 and 61 percent of the sample respectively). The two-sample Wilcoxon rank-sum (Mann-Whitney) test does not reject the null hypothesis that the distribution of these frequencies is the same (with a *p*-value of 0.388 with a corresponding test statistic of 0.863). The possible answers to how well the child got along with his or her teachers since starting school are "very well, no problems" (50 percent in each group); "quite well, hardly any problems" (approximately 30 percent among those whose mother attended residential school and 32 percent among those whose mothers did not); "pretty well, occasional problems" (approximately 11 percent for both groups); and "not too well" or "not well at all" (approximately 1 percent among children whose mothers did not attend residential school and 2 percent for those whose mothers did attend residential school). The two-sample Wilcoxon rank-sum (Mann-Whitney) test has a *p*-value of 0.218 (test statistic of 1.232), suggesting we cannot reject the null hypothesis that the distributions of these frequencies are the same for each group.

From these two questions, I created one indicator for whether the child looks forward to going to school "often or almost always" and one for getting along with his or her teacher "almost always." I choose these thresholds somewhat arbitrarily, but largely because this is where the threshold divides the responses

[6] While I do not report the results here, I have also examined the measure of school performance used by Bougie and Senécal (2010). I find results qualitatively similar to theirs but less precisely estimated.

somewhat symmetrically between the variables. I have tried changing the threshold by including and excluding additional categories with little effects on the results. I also show the results from treating each of these variables as continuous, or as ordered categorical variables.[7]

All these measures of child school experiences are reported by their mothers. If mothers suffer from substantial recall bias in whether her child has won an award, repeated a grade, or been suspended or expelled, or has incorrect perceptions of how well their child gets along with their teachers or how often they like school, then the results will not reflect actual child experiences, but rather parental perceptions.[8]

Independent Variables: Residential Schooling and Family Background Characteristics

The main independent variable of interest is whether "the respondent who knows the child best" attended residential school. Approximately 9.3 percent of the weighted sample of mothers attended residential school. However, a significant number of mothers do not provide an answer as to whether they attended residential school—about 450 individuals are excluded from the original sample of approximately 6,750 for this reason.[9]

The APSCY data used in this article also includes rich information on the Aboriginal ancestry of the children in the sample. I can use this information to potentially mitigate the role of unobservable factors in biasing the estimated effects of residential school attendance. Specifically, I propose that I can use information on the ancestral origins of each child's maternal grandmother, maternal grandfather, paternal grandfather, and paternal grandmother to account for a mother's possible eligibility to attend residential school. For each of these ancestral origin possibilities, I constructed indicator variables that take the value of 1 if this relative had Aboriginal ancestry and zero otherwise. I can summarize these variables by an indicator of whether a child has "only Aboriginal" ancestry.

I also use information on whether the respondent had a brother or sister who attended a residential school. A respondent will not have a sibling who attended a residential school if either they have no siblings, or they have siblings, but their siblings did not attend residential school. Somewhat expectedly, this varies substantially depending on whether a mother herself attended residential school. If a mother did not attend residential school, only approximately 7 percent of mother's siblings attended. However, a substantial number of mothers who attended residential school did not have a sibling that attended. Only 73 percent of mothers that attended residential also had a sibling attend. There are a number of reasons I would expect intra-family variation in residential school attendance. As mentioned, mothers in my sample who attended residential school were attending residential school in an era when the residential schools were closing down. If children were of different ages, a local residential school may have closed before the younger child entered. There is also evidence that at times parents resisted the taking of their children by hiding them (Haig-Brown, 1988; Milloy, 1999). If some children were more efficiently hidden, then they might not have attended. Finally, if a mother did not have siblings, then obviously her (non-existent) siblings would not be able to attend. A non-trivial number of cases are

[7] See Appendix Table 1A.
[8] It is possible parents with bad school experiences project them on to their children. There is little I can do to separate this hypothesis from others as I discuss below.
[9] All numbers here are approximate because of Statistics Canada's guidelines for confidentially using the APSCY.

excluded from the sample because of missing sibling information (approximately 650) or missing ancestry information (approximately another 650). Thus the final sample is approximately 5,000 children and mothers. All of my models have been re-estimated excluding these variables as controls and adding back the sample that was excluded due to missing information on these variables. The results in these models mirror those in the tables below. However, the issue of nonresponse is an important one. To the extent to which individuals who did not respond to the questions above are different than the population that did respond, my results will not be reflective of the total population of interest.[10]

A complete list of variables and their construction is given in Appendix Table A1.

Estimation and Unobservable Variable Bias

I will show that there are large, significant differences in background between mothers who attended residential school and those who did not. I will attempt to account for differences in obvious observable factors and regional differences using a multivariate probit model. However, the systematic selection of children into residential school on unobservable factors may be more problematic.

There are a number of ways that children were selected into residential school. First, a child needed to be covered under the Indian Act in order to be compelled to attend residential school.[11] This implies that whether their mother was a Registered Indian is important for her attendance. Second, even if the child were covered under the Indian Act, the clause added to the Act in 1920 left a substantial amount of discretion regarding which children could be forced to attend: Children were compelled to attend the closest school of "the kind required" (An Act to amend the Indian Act, 1920). What determined whether a school was of the kind required depended on the other schooling options and the perception of the Indian Agent regarding the "desirability" of the child's life at home. Confidential reports in the 1960s suggested that more than 50 percent of children in residential schools fell into the category of "neglected"; the percentage was over 70 percent by the late 1970s (Milloy, 1999). A set of authors have argued that many of the children sent to residential schools were not sent because they were neglected, but rather because their parents were in poverty or the authorities misunderstood Aboriginal culture (Jacobs & White, 1992; Johnston, 1983). Elsewhere I provide statistical evidence that Aboriginal children were heavily selected from the most culturally traditional homes (Feir, 2015). In addition, while parents had very little say as to where their children went to school, at times successful negotiation or resistance was possible. It is plausible that the influence of parents over where their children went to school was greater in the later era of the residential schooling system (Haig-Brown, 1988; Miller, 1996).

The fact women who attended residential school may come from significantly different family backgrounds than those who did not implies that any statistical correlations between residential

[10] It seems plausible that those who did not respond to the aforementioned questions may be the most mistrusting of data collection. To the extent this is correlated with residential school attendance, my results showing negative possible effects of residential school may be underestimated.

[11] While the Métis could attend residential school, they were not under the authority of the Indian Act and could not be compelled to attend. The Inuit were exposed to the system beginning in the 1950s and have had a complicated relationship with their coverage under the Indian Act and whether the federal government was responsible for their education. Given they are a relatively small part of my sample, I have omitted discussion of them here.

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schooling and the educational outcomes of their children may actually be due to these differences in backgrounds rather than residential schooling itself. However, if I can observe a set of variables that are highly correlated with childhood legal status of the mother and her family environment, I may be able to control for some of this unobserved variable bias. I propose that I can use information on the ancestral origins of each child's maternal grandmother, maternal grandfather, paternal grandfather, and paternal grandmother, and whether a mother's siblings also attended residential school, as proxy variables for how "culturally close" an individual may have been perceived to be in childhood or how likely they were to be a Registered Indian. While of course these variables are at best noisy proxies for those unobservable factors or for whether a mother was a Registered Indian, they may aid in mitigating the bias. Below I provide suggestive evidence in favour of these proxies.

Results

Summary Statistics

Table 1 presents the summary statistics. If the variable of interest is binary, then the table shows the proportion for which the variable equals one. If the variable is continuous or categorical, the table shows the mean of the variable with its standard error in brackets. The first column presents the statistic for children whose mother attended residential school and the second column presents the statistics for the children whose mothers did not. The third column presents the *p*-value of Pearson's Chi-squared statistic under the null hypothesis that the values are the same between groups if it is a binary variable, and the *p*-value for a *t*-test that the mean is the same between the two groups if the variable is continuous. In all estimates and statistics presented here, I use the sample weights provided by Statistics Canada and restricted my sample to observations that have non-missing information for all variables reported in Table 1. Missing data is a non-trivial problem as discussed in the last section.

It can be seen from Table 1 that there are notable differences in the ethnic ancestry of children whose mothers attended residential school and children whose mothers did not: Children who have mothers who attended residential school are more likely to have a father with Aboriginal origins, more likely to have maternal grandparents with Aboriginal origins, and substantially more likely to have paternal grandparents with Aboriginal origins. While residential school attendance by the mother may affect her likelihood of out-marriage, her attendance at residential school will not affect her own ancestry (92 percent of mothers that attended had a father who was Aboriginal while only 69 percent of mothers who did not attend residential school did). Table 1 summarizes a child's ancestry by the variable "only Aboriginal" ancestry: Of children whose mothers attended residential school, 87 percent have only Aboriginal ancestry while only 57 percent of children whose mother did not attend residential school do.

The results in Table 1 suggest that the children of mothers who attended residential school are different in other significant ways. First, those children whose mothers attended are likely to have older mothers (by approximately 2 years) and are far more likely to be located in the Manitoba or Saskatchewan than those whose mothers did not. Given the geographic and temporal distribution of residential schools, these patterns are expected. These children are also far more likely to live on reserve. Approximately 36 percent of the sample lived on reserve if their mothers attended residential school, while only 24 percent of children whose mothers did not attend live on reserve. This fraction of the sample living off reserve is low compared to the general population, but not unexpected, since the sample only includes a selected sample of the on-reserve population.

Table 1. Summary Statistics

	Statistic[a]	Mother Attended Residential School[b]	Mother Did Not Attend Residential School[c]	Statistical Significance[d]
Dependant Variables				
Repeat a grade	p̂	0.226	0.146	***
Award for grades	p̂	0.698	0.306	**
Award for other	p̂	0.679	0.738	-
Suspended or expelled	p̂	0.151	0.106	***
Get along with teachers very well	p̂	0.604	0.636	-
Likes school often or more	p̂	0.755	0.815	-
Independent Variables				
Mother's sibling attended residential school	p̂	0.736	0.071	***
Child speaks or understands an Aboriginal language	p̂	0.453	0.335	***
Mother believes Aboriginal language knowledge is very important	p̂	0.623	0.382	***
Child's mother tongue is an Aboriginal language	p̂	0.132	0.069	*
Child speaks an Aboriginal language at home	p̂	0.038	0.025	-
Child is a Registered Indian	p̂	0.83	0.48	***

(continued)

Table1. Summary Statistics (continued)

	Statistic[a]	Mother Attended Residential School[b]	Mother Did Not Attend Residential School[c]	Statistical Significance[d]
Child has only Aboriginal ancestry	$\hat{p}$	0.868	0.576	***
Mother has a high school diploma or more	$\hat{p}$	0.34	0.328	-
Mother has a bachelor's degree or more	$\hat{p}$	0.057	0.052	***
Child lives on reserve	$\hat{p}$	0.358	0.243	***
Child is in a two parent family	$\hat{p}$	0.642	0.672	*
Six or more live in same house as child	$\hat{p}$	0.453	0.274	***
Dwelling of child in need of repair	$\hat{p}$	0.623	0.574	***
Child eats breakfast every day	$\hat{p}$	0.811	0.773	-
Child is female	$\hat{p}$	0.585	0.489	*
Child's paternal grandmother is Aboriginal	$\hat{p}$	0.755	0.628	***
Child's paternal grandfather is Aboriginal	$\hat{p}$	0.717	0.566	***
Child's maternal grandmother is Aboriginal	$\hat{p}$	0.737	0.625	***
Child's maternal grandfather is Aboriginal	$\hat{p}$	0.925	0.686	***
Child lives in Ontario	$\hat{p}$	0.019	0.035	***
Child lives in Manitoba	$\hat{p}$	0.151	0.118	-

(continued)

Table1. Summary Statistics (continued)

	Statistic[a]	Mother Attended Residential School[b]	Mother Did Not Attend Residential School[c]	Statistical Significance[d]
Child lives in Saskatchewan	$\hat{p}$	0.415	0.212	***
Child lives in Alberta	$\hat{p}$	0.208	0.339	***
Child lives in British Columbia	$\hat{p}$	0.208	0.299	**
Number of siblings of child	*M*	3.289	2.519	***
	SE	(0.138)	(0.042)	
Economic family income	*M*	34,899	43,802	***
SE	*SE*	(1670)	(1085)	
Age of child	*M*	9.955	9.945	***
	SE	(0.147)	(0.066)	
Age of parent	*M*	36.895	34.867	***
	SE	(0.392)	(0.168)	
n		~900	~4,100	

Note. This table reports means of each variable with the standard error below in parentheses if the variable is continuous. If the variable is binary, the proportion of the sample for which the statement on the left is "true" is reported. The sample of individuals includes only those who had valid responses for all answers. All variable are weighted using the Census weights provided in the APSCY. The sample sizes are approximate because of confidentiality requirements of Canada's Research Data Centers.

[a] The sign $\hat{p}$ denotes a proportion is being reported (for whom the statement on the left is true). The sign *M* denotes a mean of a continuous variable and *SE* is its standard error.

[b] This column presents the value for child whose mother attended residential school.

[c] This column presents the value for the children whose mothers did not attend residential school.

[d] The Pearson chi-squared test was used if the variable was binary to test whether the values are the same between groups. A *t*-test was used if the variable was continuous to test if the means are the same between the two groups. An *F*-test was calculated for the continuous variables to determine the significance level. The asterisks indicate the level of significance: * $p < .10$, ** $p < .05$, *** $p < .01$

Second, mothers who attended residential school have lower socio-economic status than mothers who did not: For example, mothers who attended residential school are far more likely to live in a dwelling with six or more people (45 percent versus 27 percent), and on average have approximately one more child in the household. The average income of households where mothers attended residential school is approximately $10,000 lower than that of households where the mother did not. This difference is significant in economic and statistical terms. The average household income and the educational attainment of mothers are approximately what we would expect from the Census (Feir, 2013), although directly comparable information on average characteristics of mothers of Aboriginal children is not readily available. This suggests the missing data discussed above may not bias the sample in significant, observable ways.

Non-Random Selection into Residential School and Unobserved Variable Bias

In Table 2, I provide suggestive evidence that the proxies I used for unobservable differences in family background mitigate the bias discussed in the methods section. The marginal effects of each independent variable listed on the left hand side of the table and its standard errors are reported for each specification. The heading of each panel is the name of the dependant variable of interest. Each column includes different specifications of the model, controlling for different combinations of the ancestry and sibling attendance variables. Each specification conditions on the age of the mother, the child's age, gender, and region of residence. The region of residence is divided into northern and southern regions of each province in order to account for population dispersion in northern areas (approximately those census divisions above the 52-degree latitude and those below; I also include an additional category for the coastal region of British Columbia). The first row of estimates in the table reports the effect of a mother attending residential school on the dependant variable listed in the first row, holding all other factors in the specification constant. The base category in the first column, conditional on age of the child and mother, are male children in the northern region of British Columbia. As the other variables are added in the next three columns the base category becomes male children in the northern region of British Columbia with mothers whose siblings did not attend residential school and children who have ancestry attributable to none of the grandparents mentioned.

The first panel of Table 2 reports the association of a mother attending residential school with her child being a Registered Indian. There is a large positive association conditional on region and reported Aboriginal origins of the child. However, once I account for a mother's siblings' residential school status and ethnic ancestry, the association becomes small and insignificant. This result suggests that a sibling's attendance at a residential school is highly correlated with the family characteristics that would cause someone to be selected into residential schooling (we can also see this from the positive and significant coefficient). Similar results are seen in the second panel that reports the marginal effects of a mother attending a residential school on whether a child is reported to speak an Aboriginal language or live on reserve. Prior work has demonstrated that residential school attendance increases assimilation (Feir, 2015), so a future mother's attendance at a residential school should not make her child more likely to speak an Aboriginal language or live on reserve. Once the child's ethnic ancestry is controlled for, there is no association. When the mother's siblings' residential school attendance is controlled for, there are assimilative effects in line with previous literature. In particular, children whose mother attended residential school are approximately 5 percentage points less likely to speak an Aboriginal language and 4 percentage points less likely to live on reserve. This provides suggestive evidence that I am capturing at

least part of the unobserved family background characteristics that could influence both mothers' residential schooling status and the outcomes of interest.[12]

Mother's Residential School Attendance and Education

Table 3 reports the main education results for four different specifications of the probit model. All other aspects are the same as Table 2. The educational outcomes considered in Table 3 are ordered as follows: repeating a grade, expulsion or suspension, winning an award for grades, winning an award for something else, getting along very well with teachers, and liking school often or more.

The first thing to note is that controlling for age of the mother, age of the child, region of residence, and gender of the child results in the same patterns as in Table 1. Children are more likely to have repeated a grade and be suspended or expelled, but not any more or less likely to have won awards, got along with their teacher very well, or look forward to going to school often or more.

As I progressively control for more observable factors, the correlation between mother's residential school attendance and children's likelihood of repeating a grade becomes weaker. However, even in the most stringent specification, children whose mothers attended residential school are approximately 4.5 percentage points more likely to be suspended or expelled ($t = 2.15$). These effects are substantial. To give an idea of how large this correlation is, consider the fact that 7.7 percent of all students in Ontario schools had been expelled or suspended from 2003 to 2004; whereas the proportion of Aboriginal children expelled or suspended was 13.7 percent in 2001 (Ontario Ministry of Education, 2011). If these Ontario numbers were representative of my sample, given the proportion of children with mothers who attended residential school, this intergenerational correlation could explain approximately 20 percent of this suspension and expulsion difference.[13] From the third panel and fourth panel, children who have a mother who attended residential school are about 14 percentage points less likely to win awards for their grades (significant at the 1 percent alpha level) or about 12 percentage points less likely to have won awards for other activities (significant at the 5 percent level).

[12] It is likely that this does not entirely mitigate the unobserved variable bias due to non-random selection into residential school attendance. This qualifier should be kept in mind when interpreting the results.

[13] It is unclear whether the Ontario numbers are generalizable. To my knowledge, national data on expulsion and suspension rates in Canada are not available. The suspension and expulsion rate in the United States is about 7 percent so the Ontario numbers may indeed be similar to the national numbers (Wald & Losen, 2003). However, my sample is not representative of the total Aboriginal population in Canada. Thus this back-of-the-envelope calculation is at best an illustration of the plausible importance of the correlation.

Table 2. Marginal Effects from Probit Models for Proxies for Unobservable Family Background Characteristics and Mother's Residential School Attendance

	Registered Indian Status of Child				Speak an Aboriginal Language			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
Mother attended residential school	0.354***	0.271***	0.129*	0.055	0.097***	-0.005	-0.009	-0.051*
	(0.046)	(0.052)	(0.073)	(0.068)	(0.034)	(0.028)	(0.035)	(0.029)
Child is female	-0.022	-0.017	-0.027	-0.021	-0.015	-0.01	-0.016	-0.01
	(0.026)	(0.028)	(0.026)	(0.028)	(0.021)	(0.021)	(0.021)	(0.021)
Age of child	-0.002	0	-0.001	0.001	-0.001	0	-0.001	0
	(0.005)	(0.006)	(0.005)	(0.006)	(0.004)	(0.004)	(0.004)	(0.004)
Age of mother	-0.007***	-0.002	-0.009***	-0.003	-0.004***	-0.001	-0.005***	-0.001
	(0.002)	(0.003)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Child's maternal grandmother is Aboriginal		0.354***		0.345***		0.173***		0.169***
		(0.035)		(0.034)		(0.034)		(0.035)
Child's maternal grandfather is Aboriginal		0.208***		0.210***		0.153***		0.151***
		(0.039)		(0.039)		(0.029)		(0.029)
Child's paternal grandfather is Aboriginal		0.276***		0.275***		0.141***		0.140***
		(0.035)		(0.036)		(0.028)		(0.028)
Child's paternal grandmother is Aboriginal		0.312***		0.298***		0.122***		0.118***
		(0.034)		(0.034)		(0.034)		(0.034)
Mother's sibling attended residential school			0.391***	0.345***			0.167***	0.081***
			(0.033)	(0.038)			(0.031)	(0.028)
Pseudo *R*-squared	0.126	0.349	0.161	0.367	0.128	0.217	0.135	0.219
Model Chi-Squared	396.1471	781.3893	396.3195	782.5356	563.7485	622.9725	567.4309	625.8172
Log Likelihood	-3465.9	-2580.45	-3326.23	-2508.37	-3217.02	-2888.67	-3193.14	-2882.96
N	~5,000	~5,000	~5,000	~5,000	~5,000	~5,000	~5,000	~5,000

(continued)

Table 2. Marginal Effects from Probit Models for Proxies for Unobservable Family Background Characteristics and Mother's Residential School Attendance (continued)

	Live On Reserve			
	(1)	(2)	(3)	(4)
Mother attended residential school	0.100***	-0.003	-0.019	-0.040***
	(0.025)	(0.015)	(0.023)	(0.013)
Child is female	-0.021*	-0.012	-0.022*	-0.013
	(0.012)	(0.01)	(0.012)	(0.009)
Age of child	0.000	0.001	0.000	0.001
	(0.003)	(0.002)	(0.003)	(0.002)
Age of mother	-0.004***	0.000	-0.005***	-0.001
	(0.001)	(0.001)	(0.001)	(0.001)
Child's maternal grandmother is Aboriginal		0.132***		0.128***
		(0.011)		(0.011)
Child's maternal grandfather is Aboriginal		0.149***		0.146***
		(0.014)		(0.013)
Child's paternal grandfather is Aboriginal		0.131***		0.131***
		(0.015)		(0.015)
Child's paternal grandmother is Aboriginal		0.136***		0.133***
		(0.011)		(0.011)
Mother's sibling attended residential school			0.198***	0.078***
			(0.026)	(0.019)
Pseudo *R*-squared	0.125	0.33	0.139	0.334
Model Chi-Squared	703.8115	1568.275	741.4379	1564.556
Log Likelihood	-2536.24	-1941.1	-2494.95	-1929.55
N	~5,000	~5,000	~5,000	~5,000

Note. This table reports the marginal effects of each variable on the left either on the probability of the child having Registered Indian status, speaking an Aboriginal language, or living on reserve. The effect's robust standard error is given in parentheses. All specifications include a set of dummy variables for the child's region of residence. The region of residence is divided into northern and southern regions of each province in order to account for the different geography in the more northern area of provinces, which tend to be more remote. This division groups together census divisions above the 52-degree latitude and those below. I also include an additional category for the coastal region of British Columbia, so there are 11 regions in total and the omitted category is the northern half of British Columbia. The estimates of the geography variables are not reported. The asterisks indicate the level of significance: * $p < .10$, ** $p < .05$, *** $p < .01$

Table 3. Marginal Effects from Probit Models for School Outcomes and Experiences of Children Ages 7 to 14 from the 2001 Aboriginal Peoples Survey of Children and Youth

	Repeated a Grade				Suspended or Expelled			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
Mother attended residential school	0.068***	0.036*	0.01	0.025	0.042**	0.042**	0.046**	0.045**
	(0.022)	(0.019)	(0.024)	(0.027)	(0.018)	(0.019)	(0.022)	(0.021)
Child is female	-0.084***	-0.08***	-0.08***	-0.09***	-0.07***	-0.07***	-0.07***	-0.07***
	(0.014)	(0.013)	(0.013)	(0.014)	(0.012)	(0.012)	(0.012)	(0.012)
Age of child	0.018***	0.017***	0.017***	0.018***	0.030***	0.030***	0.030***	0.030***
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Age of mother	-0.001	0.000	-0.001	-0.002	-0.003**	-0.002**	-0.002**	-0.003**
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Child's maternal grandmother Aboriginal		0.041*	0.039			0.01	0.01	
		(0.024)	(0.024)			(0.018)	(0.018)	
Child's maternal grandfather Aboriginal		0.035	0.035			0.033*	0.033*	
		(0.031)	(0.031)			(0.017)	(0.017)	
Child's paternal grandfather Aboriginal		0.061**	0.060**			0.009	0.009	
		(0.03)	(0.029)			(0.019)	(0.019)	
Child's paternal grandmother Aboriginal		0.021	0.019			-0.025	-0.025	
		(0.023)	(0.023)			(0.02)	(0.02)	
Mother's sibling attended residential school			0.041	0.063**			-0.005	-0.003
			(0.029)	(0.029)			(0.013)	(0.013)
Pseudo *R*-squared	0.105	0.13	0.131	0.108	0.144	0.152	0.152	0.144
Model Chi-Squared	252.3558	296.7791	348.3252	301.032	322.0947	329.2618	329.5909	322.653
Log Likelihood	-2198.93	-2137.84	-2134.12	-2191.26	-1689.42	-1672.42	-1672.32	-1689.40

(continued)

Table 3. Marginal Effects from Probit Models for School Outcomes and Experiences of Children Ages 7 to 14 from the 2001 Aboriginal Peoples Survey of Children and Youth (continued)

	Received An Award for Grades				Awards for Other			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
Mother attended residential school	-0.011 (0.039)	-0.009 (0.040)	-0.13*** (0.049)	-0.14*** (0.049)	-0.061 (0.051)	-0.051 (0.052)	-0.112** (0.052)	-0.120** (0.052)
Child is female	0.097*** (0.051)	0.099*** (0.052)	0.099*** (0.052)	0.097*** (0.052)	-0.021 (0.051)	-0.02 (0.052)	-0.021 (0.052)	-0.021 (0.052)
Age of child	0.008* (0.051)	0.008* (0.052)	0.008* (0.052)	0.009* (0.052)	0.015*** (0.051)	0.014*** (0.052)	0.014*** (0.052)	0.015*** (0.052)
Age of mother	-0.001 (0.051)	-0.001 (0.052)	-0.002 (0.052)	-0.001 (0.052)	0.000 (0.051)	0.000 (0.052)	0.000 (0.052)	0.000 (0.052)
Child's maternal grandmother Aboriginal		-0.016 (0.052)	-0.025 (0.052)			-0.030 (0.052)	-0.035 (0.052)	
Child's maternal grandfather Aboriginal		0.003 (0.052)	-0.001 (0.052)			-0.027 (0.052)	-0.028 (0.052)	
Child's paternal grandfather Aboriginal		0.041 (0.052)	0.036 (0.052)			0.05 (0.052)	0.047 (0.052)	
Child's paternal grandmother Aboriginal		-0.01 (0.052)	-0.021 (0.052)			-0.019 (0.052)	-0.024 (0.052)	
Mother's sibling attended residential school			0.167*** (0.052)	0.165*** (0.052)			0.086*** (0.052)	0.079** (0.052)
Pseudo *R*-squared	0.021	0.023	0.032	0.03	0.026	0.029	0.031	0.029
Model Chi-Squared	74.98267	77.26974	103.4433	99.4829	91.48752	98.29998	103.933	95.88382
Log Likelihood	-3438.42	-3432.56	-3399.17	-3405.62	-3236.68	-3229.07	-3220.06	-3228.87

(continued)

Table 3. Marginal Effects from Probit Models for School Outcomes and Experiences of Children Ages 7 to 14 from the 2001 Aboriginal Peoples Survey of Children and Youth (continued)

	Get Along Well with Teachers				Like School Often and More			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
Mother attended residential school	-0.052 (0.047)	-0.028 (0.05)	-0.068 (0.049)	-0.079* (0.048)	-0.090* (0.051)	-0.102** (0.052)	-0.137** (0.052)	-0.136** (0.052)
Child is female	0.089*** (0.024)	0.090*** (0.024)	0.089*** (0.024)	0.089*** (0.024)	0.108*** (0.051)	0.111*** (0.052)	0.111*** (0.052)	0.107*** (0.052)
Age of child	-0.03*** (0.005)	-0.03*** (0.005)	-0.03*** (0.005)	-0.03*** (0.005)	-0.03*** (0.051)	-0.03*** (0.052)	-0.03*** (0.052)	-0.03*** (0.052)
Age of mother	0.003 (0.051)	0.002 (0.052)	0.001 (0.052)	0.003 (0.052)	0.004** (0.051)	0.004** (0.052)	0.004** (0.052)	0.004* (0.052)
Child's maternal grandmother Aboriginal		-0.013 (0.052)	-0.016 (0.052)			0.01 (0.052)	0.008 (0.052)	
Child's maternal grandfather Aboriginal		-0.083* (0.052)	-0.084** (0.052)			-0.035 (0.052)	-0.037 (0.052)	
Child's paternal grandfather Aboriginal		0.049 (0.052)	0.048 (0.052)			0.107*** (0.052)	0.106*** (0.052)	
Child's paternal grandmother Aboriginal		-0.090** (0.052)	-0.09*** (0.052)			0.002 (0.052)	-0.001 (0.052)	
Mother's sibling attended residential school			0.063* (0.052)	0.04 (0.052)			0.043 (0.052)	0.054** (0.052)
Pseudo *R*-squared	0.03	0.038	0.039	0.031	0.052	0.063	0.064	0.054
Model Chi-Squared	83.96365	107.4775	109.9798	85.24711	86.12395	105.6421	111.1879	93.322
Log Likelihood	-3649.15	-3620.55	-3616.85	-3647.61	-2636.87	-2606.09	-2603.11	-2631.96
N	~5,000	~5,000	~5,000	~5,000	~5,000	~5,000	~5,000	~5,000

Note. This table reports the marginal effects of each variable on the left either on the probability of the child repeating a grade, being suspended or expelled, winning an award for their grades, winning an award for other activities, getting along very well with their teachers, and looking forward to going to school often or more. The effect's robust standard error is given in parentheses. All specifications include a set of dummy variables for the child's region of residence. The region of residence is divided into northern and southern regions of each province. This division groups together census divisions above the 52-degree latitude and those below. I also include an additional category for the coastal region of British Columbia, so there are 11 regions in total and the omitted category is the northern half of British Columbia. The estimates of the geography variables are not reported.

The asterisks indicate the level of significance: * $p < .10$, ** $p < .05$, *** $p < .01$

The last two panels of Table 3 contain the marginal effect of mothers' residential school attendance on the likelihood of their children getting along with their teachers very well and liking school often or more. There is a negative correlation between children getting along very well with their teachers and liking school often with mothers' residential school attendance. This correlation is always statistically significant for liking school often or more. However, in the case of both dependent variables, the negative correlation becomes larger as more family controls are added, suggesting that these ancestry characteristics are positively associated with these positive school experiences. In my preferred specification (specification 4), children whose mother attended residential school are about 8 percentage points less likely to get along with their teachers and nearly 14 percentage points less likely to enjoy school almost all of the time. If these school experience variables are treated either as continuous or categorical variables, these negative correlations are even more precisely estimated and robust (these results are presented in Appendix Table A2). From these models, the findings of both looking forward to school and getting along with one's teachers are more precisely estimated and again, a robust negative relationship between school experiences and residential school attendance is found. Taking all these findings together, a mother's residential school attendance and her child's educational experiences are negatively correlated.[14] This implies *on average* mothers who attended residential school may have had poorer educational experiences than those who had not attended residential school, but there still may be substantial heterogeneity in experiences. In addition, given the historical context in which the mothers in my sample attended residential school, these negative experiences might reasonably be assumed to be less negative than in earlier eras.

As shown by the statistics in Table 1 and 2, there are significant differences in parental characteristics. While I cannot completely test the hypothesis, I can look for evidence that differences in a mother's socio-economic characteristics and cultural connectedness explain the correlation between mother's residential school attendance and child school experiences.[15] The socio-economic factors I include are whether the child lives in a two-parent household, whether there are more than six people in the home, whether the dwelling is in need of repair, the number of siblings in the home, economic family income, and whether the child eats breakfast every day. I also condition on whether the mother has a high school diploma or bachelor's degree or higher, and whether the child lives on reserve. Finally, I condition on several cultural outcomes including whether the child has only Aboriginal ancestry, whether they are a Registered Indian, whether they speak an Aboriginal language at home, whether speaking an Aboriginal language is important to the mother, and whether the child speaks an Aboriginal language. I present models that control for these factors in Table 4. If adding these factors causes the marginal effect of a mother's residential school attendance on her children's outcomes to significantly reduce in size, then it is common to view this as evidence that these factors explain or mitigate the effect of residential school attendance.

[14] Again, caution should be taken in interpreting this correlation is causal, as the controls here may not fully address the non-random selection of mother's into residential school.

[15] Previous work has shown that cultural connectedness can support resilience (Berry, 1999), but other work has shown cultural divides between families and the education system (such as language barriers) can result in worse child school performance (Barnes et al., 2005; Battisti, Friesen, & Krauth, 2014) so the impact of aspects of a child's environment on the educational outcomes is not clear.

Table 4. The Marginal Effect of Residential School Attendance on Children's School Experiences Conditioning on Parental and Other Characteristics

	Repeated a Grade	Suspended or Expelled	Awards for Grades	Award for Other	Get Along Well with Teacher	Like School Often or More
Mother attended residential school	0.010 (0.023)	0.042** (0.021)	-0.130*** (0.050)	-0.104** (0.051)	-0.069 (0.047)	-0.138** (0.056)
Gender of child	-0.078*** (0.012)	-0.067*** (0.01)	0.100*** (0.023)	-0.019 (0.021)	0.095*** (0.024)	0.114*** (0.02)
Age of child	0.016*** (0.002)	0.027*** (0.003)	0.010** (0.005)	0.015*** (0.004)	-0.030*** (0.005)	-0.022*** (0.004)
Age of mother	0.000 (0.001)	-0.002** (0.001)	-0.001 (0.002)	-0.001 (0.002)	0.001 (0.002)	0.004* (0.002)
Mother has a high school diploma or higher	-0.001 (0.014)	0.012 (0.014)	0.000 (0.028)	0.066*** (0.025)	0.016 (0.031)	0.012 (0.025)
Mother has a bachelor's degree or higher	-0.081*** (0.015)	-0.036** (0.016)	0.066 (0.057)	0.004 (0.06)	0.007 (0.063)	0.034 (0.047)
Two parent household	-0.024* (0.013)	-0.008 (0.011)	-0.008 (0.026)	-0.03 (0.023)	0.024 (0.027)	0.023 (0.023)
Child lives in home with six or more	0.022 (0.016)	-0.022** (0.010)	0.007 (0.025)	-0.011 (0.026)	-0.048 (0.03)	0.006 (0.02)
Child lives in dwelling in need of repair	0.016 (0.013)	-0.002 (0.011)	0.034 (0.024)	0.034 (0.022)	0.001 (0.026)	0.033 (0.022)
Number of siblings of child	0.009*** (0.003)	0.005** (0.002)	-0.005 (0.006)	-0.008 (0.005)	-0.007 (0.006)	-0.007 (0.005)
Economic family income of child (1,000s)	-0.003 (0.002)	-0.003 (0.002)	-0.001 (0.004)	0.005 (0.005)	0.004 (0.005)	0.008** (0.004)
Child eats breakfast every day	-0.035** (0.018)	-0.060*** (0.016)	0.044 (0.029)	0.000 (0.025)	0.075*** (0.028)	0.083*** (0.023)

(continued)

Table 4. The Marginal Effect of Residential School Attendance on Children's School Experiences Conditioning on Parental and Other Characteristics (continued)

	Repeated a Grade	Suspended or Expelled	Awards for Grades	Award for Other	Get Along Well with Teacher	Like School Often or More
Child is a Registered Indian	0.013 (0.029)	0.024 (0.02)	-0.04 (0.042)	-0.002 (0.039)	0.004 (0.051)	-0.003 (0.035)
Child has only Aboriginal ancestry	-0.006 (0.03)	-0.018 (0.02)	0.036 (0.043)	-0.045 (0.038)	0.021 (0.051)	0.049 (0.043)
Mother and child on reserve	0.017 (0.014)	0.009 (0.011)	0.048** (0.023)	0.065*** (0.022)	-0.012 (0.025)	-0.026 (0.02)
The child speaks an Aboriginal language	-0.001 (0.013)	-0.002 (0.011)	0.086*** (0.024)	0.111*** (0.02)	0.043 (0.026)	0.026 (0.018)
Mother thinks her child learning an Aboriginal language is very important	0.029* (0.016)	-0.001 (0.011)	0.051** (0.025)	0.025 (0.022)	0.063** (0.026)	0.006 (0.02)
The child's first language was an Aboriginal one	-0.030** (0.013)	-0.016 (0.012)	-0.085** (0.033)	-0.104*** (0.033)	0.029 (0.029)	0.013 (0.022)
The family speaks an Aboriginal language at home	-0.042*** (0.016)	0.042 (0.031)	-0.053 (0.05)	-0.110** (0.046)	0.004 (0.046)	-0.016 (0.047)
Pseudo *R*-squared	0.155	0.178	0.048	0.057	0.05	0.085
Model Chi-Squared	476.9861	419.654	142.3232	174.2869	142.6746	165.381
Log Likelihood	-2075.61	-1622.66	-3345.18	-3134.85	-3574.68	-2545.8
N	~5,000	~5,000	~5,000	~5,000	~5,000	~5,000

Note. This table reports the marginal effects of each variable on the left either on the probability of the child repeating a grade, being suspended or expelled, winning an award for their grades, winning an award for other activities, getting along very well with their teachers, and looking forward to going to school often or more. The effect's robust standard error is given in parentheses. All specifications include a set of dummy variables for the child's region of residence. The region of residence is divided into northern and southern regions of each province. This division groups together census divisions above the 52-degree latitude and those below. I also include an additional category for the coastal region of British Columbia, so there are 11 regions in total and the omitted category is the northern half of British Columbia. The estimates of the geography variables are not reported. The specifications include the dummy variables for a child having Aboriginal ancestry from the maternal grandmother, grandfather and paternal grandmother and grandfather as well as for whether the mother's sibling also attended residential school.
The asterisks indicate the level of significance: * $p < .10$, ** $p < .05$, *** $p < .01$

The first thing to note is that the coefficients on the socio-economic variables and mother's characteristics are of the expected sign in general and a number of the coefficients are statistically different than zero. Having a higher number of siblings tends to increase the probability of repeating a grade or being suspended. Eating breakfast every day is the most consistent predictor of better educational outcomes for children. If the child was reported to eat breakfast every day they were 3.5 percentage points less likely to repeat a grade, 6 percentage points less likely to be expelled, and nearly 8 percent more likely to get along very well with their teachers or like school often or more. The results also suggest having a better educated mother is generally associated with better educational outcomes for her children.[16] If a child's mother has a bachelor's degree, the child was about 12 percentage points more likely to be reported to like school almost always and to win awards for their grades. These children were also 15 percentage points more likely to have won an award for something other than academics. The children of mothers with a bachelor's degree were also 4 percentage points less likely to be suspended or expelled. Economic family income was not significant in most specifications, but was positively and significantly associated with looking forward to going to school. If I were to exclude the grandparent ancestry questions, then increases in income would be significantly associated with a decreased likelihood of expulsion.

Whether the child was a Registered Indian and having only Aboriginal ancestry are not significantly correlated with children's outcomes. While living on reserve is not statistically significant in other specifications, children living on reserve were more likely to win awards for their grades and for other activities. This may be due to the types of school children on reserve attend on average—for example, perhaps on-reserve schools have more awards to give or one's mothers notice or care about more. It could also be that children are more likely to apply themselves or be involved in activities in these schools (Richards & Scott, 2009).

The variables indicating Aboriginal language knowledge, use, and importance have mixed effects. While none of these factors are significant in how often the child looks forward to going to school, children whose mothers believe that knowledge of an Aboriginal language is very important are more likely to get along well with their teachers and are more likely to win awards for their grades. If the child's first language was an Aboriginal one, or the family speaks an Aboriginal language at home, the child is less likely to win awards, but they are more likely to win awards if they can speak an Aboriginal language. This may suggest Aboriginal language knowledge encourages good outcomes in school, as long as it is not correlated with lack of full fluency in Standard English (Battisti et al., 2014; O'Gorman & Pandey, 2015). The correlations of Aboriginal language knowledge with the likelihood of repeating a grade seem inverted to what one would expect given the signs in the other models. This is somewhat difficult to explain.

However, despite the fact many of the variables in the model are significantly correlated with children's educational outcomes, from the first row of Table 4 it can be seen that the negative correlation between a mother's residential school attendance and her child's educational outcomes and experiences remains with little reduction in magnitude. In estimates not reported here, I show that if I condition on a set of

[16] This is in line with previous literature (see Currie & Moretti, 2003 for an example).

child health characteristics[17] or add the same measure as Bougie and Senécal (2010) for food security the intergenerational effect of residential schooling remains (see Feir, 2015).[18]

The another possible explanation for the negative correlation between mother's residential school attendance and her children's outcomes is the negative effect of residential school on a mother's parenting skills, mental health, or perceptions about Aboriginal and non-Aboriginal people and societies. While I cannot empirically investigate many of these factors directly, prior literature suggests each of these explanations is plausible. Many of the educational outcomes studied here are not discrete events, but rather the culmination of a number of a child's experiences. For example, suspension or expulsion is likely influenced by poor school experiences and attendance, their parents' ability to act as advocates for their children, alienation from the school, or perceived behavioural problems (Morrison et al., 2001; Tobin & Sugai, 1999). Many other factors, including being identified as having behavioural problems, are often highly correlated with unstable home lives (McBride & McKee, 2001). While the evidence is mixed, there is a building empirical literature that finds negative correlations between residential school attendance and mental health (Bombay, Matheson, & Anisman, 2011; Cariboo Tribal Council, 1991; Elias et al., 2012; Nuu-Chah-Nulth Tribal Council, 1994).[19] There is also qualitative evidence that suggests residential schooling leads to cooler, harsher or violent parenting styles (Evans-Campbell, 2008; Stonefish, 2007; Stout & Peters, 2011; TRC, 2015, pp. 218-219).

Residential schooling could impact children is through parental perceptions. Residential school survivors have been shown in some samples to be less likely to trust the government (Bombay, Matheson & Anisman, 2013). Since trust attitudes are intergenerationally correlated (Dohmen, Falk, Huffman, & Sunde, 2012), the residential school attendees and their children may be less likely to trust and invest in Western school institutions. Aboriginal children and their parents' reporting of their school experiences have been summarized by numerous authors as embedding a cultural and experiential divide and a lack of trust of the school institutions more generally (Bell & Anderson, 2004; Gunn et al., 2011; McBride & McKee, 2001; Silver et al., 2002). Previous literature has also demonstrated that those people whose family members attended residential school are more likely to view their Aboriginal heritage as an important aspect of their identity and thus more negatively experience discrimination (Bombay, Matheson, & Anisman, 2014).[20] These previous findings suggest that residential school attendance may magnify negative child school experiences in Western educational settings. It may also increase the probability of expulsion or suspension because parents are less willing to act in advocacy roles for their children because of a mistrust of the school system more generally. While I can see no way

[17] Child health could affect educational outcomes by increasing the likelihood children would be absent from school or their ability to focus on their studies (Currie, 2008). The measures of child health were height, body mass index, birth weight, and a dummy variable indicating the mother reports the child was in excellent health.
[18] This finding contrasts with the results of Bougie and Senécal (2010) who found the effect of residential schooling from the parents to be negatively correlated with parental perceptions of child academic performance. This remains the case if I control for exclusively all the variables they investigate (including excluding all ancestry and sibling residential schooling variables). The difference in these findings could be due to differences in methodology, sample composition, and/or dependant variable.
[19] Mota et al. (2012), for example, do not find a negative correlation between residential schooling and health.
[20] It is possible that these findings are due to the selection of families into residential school so all findings here could simply be due to unobservable variable bias.

to test this directly using the data I have available (nor can I test changes in parenting style or parental mental health), I can test a possible implication of this effect of residential schools.

The Intergenerational Effect of Residential School On-Reserve and Off-Reserve

The plausible change in parental attitudes discussed above would be in line with theories of cultural discontinuity (Kanu, 2007) combined with theories that link historical trauma, identity centrality, and perceived discrimination. Increased identification with ethnic minority ancestry has been shown to be correlated with a greater probability of perceived racial discrimination, which is associated with physiological stress (Sellers & Shelton, 2003). Living off reserve and attending a public (non-Aboriginal) school may increase the probability that children experience discrimination and this could worsen their experiences at school (Bell & Anderson, 2004; Gunn et al., 2011; McBride & McKee, 2001; Silver et al., 2002). I provided evidence in Table 2 that mother's residential school attendance may make children more likely to live off reserve conditional on a set of observable factors. Of all students who live on reserve in this age range, only 60 percent attend school on reserve (Richards & Scott, 2009), so place of residence has meaningful implications for type of school a child will attend. While the results in Table 4 suggest this difference in place of residence (and thus possible type of school attended) does not explain the negative correlation between parental residential school attendance and children's educational outcomes, the theories discussed above suggest that parental residential school attendance may affect their children differently depending on their social and educational context.

Table 5 reports results of the same models estimated as in Table 3 but the relationship between mother's residential school attendance and her child's educational experiences is interacted with whether a child lived on reserve or not. The sign and statistical significance of this interaction term indicates whether the residential schooling has a different relationship with educational experiences on or off reserve.[21]

While the coefficients on the interaction term between mother's residential school attendance and on-reserve status are not statistically significant, the point estimate for the likelihood of winning awards for grades (the negative correlation between parental residential school attendance was 3 percentage points smaller) or other activities (4 percentage points smaller) is not economically small, possibly suggesting the conditional probability function for these outcomes is different depending on reserve status. However, these results are noisily estimated and the sample of reserves included here is highly selective. This noisy estimation could be partially due to the fact that place of residence is not a perfect predictor for the type of school a student attends. While the results are not completely clear, these findings may suggest that future research into both the cultural discontinuity and identity hypothesis is warranted with more precise data on type of school attended and more representative data of the on reserve population.

[21] It should be noted that interaction terms and their interpretations can be problematic. For those wishing an in depth discussion of these issues, please see Ali and Norton (2003), Greene (2010), and Karaca-Mandic, Norton, and Dowd (2012).

Table 5. Marginal Effects from Probit Models for Differential Correlation of Mother's Residential School Attendance by Reserve Status

	Repeated a Grade	Suspended or Expelled	Awards for Grades	Awards for Other	Gets Along Well With Teachers	Likes School Often or More
Mother attended residential school	0.014	0.044	-0.137**	-0.125*	-0.082	-0.164**
	(0.024)	(0.03)	(0.065)	(0.065)	(0.072)	(0.079)
Child is female	-0.080***	-0.066***	0.100***	-0.02	0.090***	0.111***
	(0.013)	(0.012)	(0.023)	(0.022)	(0.024)	(0.02)
Age of child	0.017***	0.030***	0.008*	0.014***	-0.033***	-0.025***
	(0.003)	(0.003)	(0.005)	(0.005)	(0.005)	(0.004)
Age of mother	-0.001	-0.002**	-0.002	0.000	0.001	0.004**
	(0.001)	(0.001)	(0.002)	(0.002)	(0.002)	(0.002)
Child's maternal grandmother is Aboriginal	0.035	0.009	-0.033	-0.041	-0.016	0.01
	(0.025)	(0.018)	(0.035)	(0.032)	(0.039)	(0.033)
Child's maternal grandfather is Aboriginal	0.013	-0.027	-0.03	-0.032	-0.095***	0.000
	(0.024)	(0.02)	(0.033)	(0.032)	(0.036)	(0.032)
Child's paternal grandfather is Aboriginal	0.030	0.031*	-0.010	-0.036	-0.085**	-0.036
	(0.031)	(0.018)	(0.038)	(0.038)	(0.043)	(0.033)
Child's paternal grandmother is Aboriginal	0.054*	0.007	0.026	0.038	0.047	0.106***
	(0.03)	(0.02)	(0.038)	(0.037)	(0.041)	(0.034)
Mother's sibling attended residential school	0.037	-0.006	0.162***	0.080***	0.062*	0.043
	(0.029)	(0.012)	(0.025)	(0.031)	(0.033)	(0.028)
Mother and child live on reserve	0.035***	0.011	0.064***	0.055***	0.003	-0.012
	(0.014)	(0.012)	(0.022)	(0.02)	(0.024)	(0.02)
On-reserve x mother attended residential school	**-0.004**	**0.005**	**0.030**	**0.043**	**0.038**	**0.055**
	(0.029)	**(0.027)**	**(0.057)**	**(0.056)**	**(0.075)**	**(0.046)**
Pseudo *R*-squared	0.133	0.153	0.034	0.034	0.039	0.065
Model Chi-Squared	365.9598	342.4851	109.8844	110.3902	110.7191	111.5724
Log Likelihood	-2129.53	-1671.52	-3391.4	-3212.66	-3616.4	-2601.64
N	~5,000	~5,000	~5,000	~5,000	~5,000	~5,000

Note. This table reports the marginal effects of each variable on the left either on the probability of the child repeating a grade, being suspended or expelled, winning an award for their grades, winning an award for other activities, getting along very well with their teachers, and looking forward to going to school often or more. The effect's robust standard error is given in parentheses. All specifications include a set of dummy variables for the child's region of residence. The region of residence is divided into northern and southern regions of each province. This division groups together census divisions above the 52-degree latitude and those below. I also include an additional category for the coastal region of British Columbia, so there are 11 regions in total and the omitted category is the southern half of British Columbia. The estimates of the geography variables are not reported.
The asterisks indicate the level of significance: * $p < .10$, ** $p < 0.05$, *** $p < 0.01$

Mothers' Siblings' Residential School Attendance

The final possibility I explore is the extent to which the intergenerational effects of residential school may have depended on the mother's experiences at residential school. While I have very little information on mothers' residential schooling experience directly, I do know whether their siblings also attended residential school. While it was not uncommon for siblings to be separated in residential schools, they were not always. In fact, former students who told their stories to the TRC often mentioned sibling support (TRC, 2015). These stories of support may be relevant in understanding how residential school experiences affect future generations, especially since previous literature suggests that siblings may play an important protective role in stressful or traumatic environments. Milevsky and Levitt (2005) showed, in their sample of 11- to15-year-olds, sibling support was associated with higher self-esteem, more positive school attitudes, increased school adaptation, and that sibling support could potentially compensate for absent parental support. In addition, siblings may serve an important role in the upbringing and teaching of younger siblings (Farver, 1993). Other work suggests that siblings being present may aid in moderating the stresses experienced by socio-economically disadvantaged families (Hetherington, 1989; Rutter, 1990; Sandler, 1980). There is also evidence that in extreme circumstances of parental unavailability or trauma, siblings can compensate for these parental relationships (Bank, 1992; Bank & Kahn, 1982; Dunn & Kendrick, 1982). Even if siblings are separated during their schooling year, siblings experiencing the same events may give them additional support later in life (Avioli, 1989; Milevsky, 2005). If mothers were protected from the more negative possible impacts of residential school because their siblings shared similar experiences or were present while they attended school, their children may be less negatively affected as well.

To explore the possibility that the residential schooling experience may have varied significantly depending on whether someone attended residential school with other members of their family, I allow the conditional probability of each of the educational experience outcomes to be differentially affected by a mother's residential school attendance depending on whether she had a sibling that also attended residential school. I do this by estimating the same model in Table 3 but now including an interaction term. The sign and statistical significance of this interaction term is informative as to whether the negative educational experiences correlated with mother's residential school attendance are different if a mother also had one of their siblings attend residential school.

While the results in Table 6 are again noisy for many of the educational outcomes, the signs are largely in the anticipated direction with the exception of getting along very well with teachers. However, there is a significantly smaller negative correlation between receiving an award for other activities, and liking school with mother's residential school attendance. These findings are consistent with siblings playing some mitigating role in the effects of the residential schooling system.

Table 6. Differential Correlation of Mother's Residential School Attendance by Sibling's Attendance

	Repeat a Grade	Suspended or Expelled	Awards for Grades	Award for Other	Get Along with Teachers	Like School Often or More
Mother attended residential school	0.030 (0.039)	0.051 (0.036)	-0.192** (0.08)	-0.217*** (0.073)	-0.03 (0.062)	-0.211** (0.093)
Child is female	-0.081*** (0.013)	-0.066*** (0.012)	0.099*** (0.023)	-0.021 (0.022)	0.090*** (0.024)	0.111*** (0.02)
Age of child	0.017*** (0.003)	0.030*** (0.003)	0.008* (0.005)	0.014*** (0.005)	-0.033*** (0.005)	-0.025*** (0.004)
Age of mother	-0.001 (0.001)	-0.002** (0.001)	-0.002 (0.002)	0.000 (0.002)	0.001 (0.002)	0.004** (0.002)
Child's maternal grandmother is Aboriginal	0.039 (0.024)	0.01 (0.018)	-0.024 (0.035)	-0.033 (0.032)	-0.017 (0.039)	0.009 (0.033)
Child's maternal grandfather is Aboriginal	0.018 (0.023)	-0.025 (0.02)	-0.02 (0.033)	-0.023 (0.031)	-0.095*** (0.035)	0.000 (0.032)
Child's paternal grandfather is Aboriginal	0.035 (0.031)	0.033* (0.017)	0.000 (0.038)	-0.027 (0.038)	-0.085** (0.043)	-0.036 (0.033)
Child's paternal grandmother is Aboriginal	0.059** (0.029)	0.009 (0.019)	0.037 (0.037)	0.048 (0.037)	0.047 (0.041)	0.106*** (0.034)
Mother's sibling attended residential school	0.049 (0.036)	-0.003 (0.014)	0.143*** (0.026)	0.044 (0.034)	0.078** (0.032)	0.014 (0.026)
Mother attended & her sibling attended residential school	**-0.028 (0.04)**	**-0.007 (0.03)**	**0.099 (0.07)**	**0.141*** **(0.055)**	**-0.066 (0.09)**	**0.089* (0.053)**
Pseudo *R*-squared	0.131	0.152	0.033	0.033	0.039	0.065
Model Chi-Squared	350.2897	329.6633	106.1703	109.182	112.2169	113.7786
Log Likelihood	-2133.7	-1672.29	-3397.02	-3214.01	-3618.2	-2599.67
N	~5,000	~5,000	~5,000	~5,000	~5,000	~5,000

Note. This table reports the marginal effects of each variable on the left either on the probability of the child repeating a grade, being suspended or expelled, winning an award for their grades, winning an award for other activities, getting along very well with their teachers, and looking forward to going to school often or more. The effect's robust standard error is given in parentheses. All specifications include a set of 10 dummy variables for the child's region of residence. The region of residence is divided into northern and southern regions of each province using census divisions above the 52-degree latitude and those below. I also include a category for the coastal region of British Columbia. The omitted category is the northern half of British Columbia. The estimates of the geography variables are not reported.
The asterisks indicate the level of significance: * $p < .10$, ** $p < .05$, *** $p < .01$.

Obviously, information on sibling residential school attendance is very crude measure of sibling support during residential schooling years and interpreting interaction terms in non-linear models is difficult. For example, if a child had numerous siblings it would be more likely that at least one of her siblings attended residential school. In fact, it is possible that the differing intergenerational effects of residential schooling by siblings' residential school attendance may be due to a spurious correlation between residential schooling, parental family size, and children's educational outcomes. It is also possible that mothers who attend residential school and who did not have siblings who attended are a more non-randomly selected group of mothers than the mothers who did have siblings attend. It could also be possible that mothers in these groups attended different types of residential schools than those who attended residential school with their siblings. All of these alternative explanations for my findings are at least equally as plausible as siblings acting as a mitigating force against the negative effects of residential school attendance. Future work should investigate the plausibility of each of these alternatives.

Discussion and Conclusion

I have presented empirical evidence that suggests residential schooling has negative intergenerational consequences on children's educational experiences, such as suspension and expulsion, and winning awards in school. I have also demonstrated—conditional on a set of observable factors—that the children of women who have attended residential school are less likely to look forward to school and are less likely to get along with their teachers. These findings are not explained by the socio-economic characteristics of their households that I included in my models. This could imply that the intergenerational correlation may be explained by unmeasured factors such as parental mental health, attitudes towards education, or parenting style.

I demonstrate that mother's residential school attendance is correlated with living off reserve, conditional on set of observable background characteristics. This motivates me to investigate whether the intergenerational correlation is different on and off reserve. While the point estimates suggest the negative intergenerational correlation of residential school attendance and educational experiences (such as liking school) differ by reserve status, the results are noisily estimated and warrant further study. I also demonstrate that the intergenerational negative correlation between mother's residential school attendance and her children's educational experiences seems to be mitigated for mothers whose siblings also attended residential school. While there are many possible interpretations of this finding, it may be that siblings played an important role in mitigating the negative influences of residential schooling.

There are a number of limitations to the results presented here that have been discussed throughout the article. The first is that unobservable variable bias may be a problem and could be driving the correlations I observe. In addition, the reserves included in my sample are not representative, and my measure of whether a mother attended residential school with her sibling is only a rough proxy of sibling support. In addition, all my variables are responses from the mother about the child and may measure parental perceptions rather than child experiences. Missing data due to non-response is also a non-trivial problem.

However, while the work done here is preliminarily, my results suggest several avenues and policy options that should be explored more thoroughly. First, my results suggest that early intervention may be necessary to combat the intergenerational legacy of residential schools. Before children graduate or

drop out of high school, they are more likely to be suspended or expelled, and to have less positive school experiences before the age of 15. 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. Policies should be sensitive to this legacy of the residential schooling system and should take it into account the higher rates of expulsion, and differential school experiences of youth.

Second, the results suggest there are possible gains from preserving family units as much as possible through a child's educational years. Many Registered Indian children must still leave their reserves if they wish to attend high school (Mackay & Myles, 1995; Talaga, 2015). The fact that I find evidence (albeit noisily) that the negative intergenerational correlation of residential schooling seems to be greater for mothers who did not also have siblings that attended residential school may suggest that siblings provide an important source of support during these transitionary and potentially difficult times. This is also in line with the literature on the importance of sibling support discussed above. In addition, this finding may have implications for the child welfare system where Aboriginal children are overrepresented (Sinha & Leduc, 2011). However, the modern schooling and child welfare context have significant differences from the context I study and my extrapolation should be taken with caution.

A third possible policy avenue for future research is to examine the differential effects of residential schooling based on current schooling contexts. When combined with other literature, this work (inconclusively) suggests that the intergenerational correlation of residential school and education may be magnified off reserve. If this is true, educators may want to ensure that they create environments that are supportive of Aboriginal cultural retention (Berry, 1999; McBride & McKee, 2001). School environments that promote Aboriginal cultural retention, possibly by offering language courses, may mitigate some of the negative school experiences of Aboriginal children that could be exacerbated by parental residential school attendance (O'Gorman & Pandey, 2015). The inclusion of culturally relevant curricula has also been shown in other minority groups to significantly increase school retention and performance (Dee & Penner, 2016). It has been shown that teachers with similar characteristics to their students (such as race or ethnicity) are associated with improved student outcomes (Fairlie, Hoffmann, & Oreopoulos, 2011; Hoffmann & Oreopoulos, 2009) and this has been shown in Aboriginal contexts as well (O'Gorman & Pandey, 2015). In addition, Friesen and Krauth (2010) suggested that Aboriginal children living off reserve, if anything, perform better when they are educated with Aboriginal peers. Kanu (2007) also suggested that integrating Aboriginal cultural perspectives and knowledge into the classroom may improve academic achievement and Silver and colleagues (2002) suggested similar policies may increase school retention. Berry (1999) and Kirmayer, Brass, and Tait (2000) have argued that Aboriginal cultural retention is preventive against the negative impacts of colonization more generally. These policy avenues may be more or less effective depending on family histories with residential school exposure.

Another possible implication may be the extension of additional support services for mothers that attended residential school. While the Indian Residential School Settlement Agreement (IRSSA) did establish the former Aboriginal Healing Foundation (AHF) for a time and provided funds for healing through the Common Experience Payment (CEP) (TRC, 2012), more support may be necessary. Some survivor services do exist (such as those provided by the Indian Residential School Survivor Society or Health Canada though the Indian Residential Schools Resolution Health Support Program), additional

programming to cope with the negative educational intergenerational effects may prove useful. Support services for other family members who play active roles in supporting children perhaps should be made as available as well. Further work should be done to investigate the roles of these other family members in the intergenerational effects of residential school.

The last policy implication is that we require more complete data collection. The results I presented suggest that context may matter substantially for the intergenerational effects of residential schools, although the ability to learn about this context is currently limited. The APSCY 2001 does not have extensive information on a child's school environment, and more recent waves of the APSCY do not contain children who live on reserve as a target population. Further data collection on schooling environments could help discern why I observe the negative intergenerational patterns of residential school attendance. For example, even simple information on whether the child attended school on or off reserve may be useful to understand the sort of schooling environments children were exposed to, and whether those differences matter for positive educational experiences.

In conclusion, I find, holding a number of factors constant, that mothers' residential school attendance is negatively associated with their children's educational experiences. I also show that, conditional on the same set of factors, the children of mothers who attended residential school are both more likely to live off reserve and less likely to speak an Aboriginal language. These findings suggest that dealing with the intergenerational legacy of residential schools may be a necessary component of improving the educational outcomes of today's Aboriginal youth and moving forward in reconciliation (TRC, 2015).

References

Aboriginal Healing Foundation (AHF). (2002). *The healing has begun: An operational update from the Indigenous Healing Foundation.* Ottawa, ON: Author. Retrieved from http://www.ahf.ca/downloads/the-healing-has-begun.pdf

Abu-Hilal, M. M. (2000). A structural model of attitudes towards school subjects, academic aspiration and achievement. *Educational Psychology, 20*(1), 75-84. doi: http://dx.doi.org/10.1080/014434100110399

Ali, C., & Norton, E. C. (2003). Interaction terms in logit and probit models. *Economics Letters, 80*(1), 123-129. doi: http://dx.doi.org/10.1016/S0165-1765(03)00032-6

Aman, C. (2009). Exploring the influence of school and community relationships on the performance of Aboriginal students in British Columbia public schools. In J. White, J. Peters, D. Beavon, & N. Spence (Eds.), *Aboriginal education: Current crisis and future alternatives* (pp.175-196). Toronto, ON: Thompson Educational Publishing.

An Act to amend the Indian Act. (1920). S. C. 1919-20, c. 50. (10-11 Geo. V.). Retrieved from http://epe.lac-bac.gc.ca/100/205/301/ic/cdc/aboriginaldocs/m-stat.htm

Assembly of First Nations (AFN). (2002). *Human rights report to non-governmental organizations: Redress for cultural genocide: Canadian residential schools.* Retrieved from http://www.turtleisland.org/news/afnrezschools.pdf

Avioli, P. S. (1989). The social support functions of siblings in later life: A theoretical model. *The American Behavioral Scientist, 33*(1), 45-57. doi: http://dx.doi.org/10.1177/0002764289033001005

Bank, S. P. (1992). Remembering and reinterpreting the sibling bond. In F. Boer & J. Dunn (Eds.), *Children's sibling relationships: Developmental and clinical issues* (pp. 139–151). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.

Bank, S. P., & Kahn, M. D. (1982). *The sibling bond.* New York, NY: Basic Books

Barnes, R., Josefowitz, N., & Cole, E. (2005). Residential schools: Impact on Aboriginal students' academic and cognitive development. *Canadian Journal of School Psychology, 21*(18), 18–32.

Battisti, M., Friesen, J., & Krauth, B. (2014). English as a second dialect policy and achievement of Aboriginal students in British Columbia. *Canadian Public Policy, 40*(2), 182–92. doi: http://dx.doi.org/10.3138/cpp.2012-093

Bell, D., & Anderson, K. D. (2004). *Sharing our success: Ten case studies in Aboriginal schooling.* Kelowna, BC: Society for the Advancement of Excellence in Education.

Berry, J.W. (1999). Aboriginal cultural identity. *Canadian Journal of Native Studies, 19*(1), 1–36.

Bombay, A., Matheson, K., & Anisman, H. (2011). The impact of stressors on second generation Indian Residential School survivors. *Transcultural Psychiatry, 48*(4), 367-391. doi: http://dx.doi.org/10.1177/1363461511410240

Bombay, A., Matheson, K., & Anisman, H. (2013). Intergroup trust and forgiveness in relation to the government apology to Aboriginal peoples in Canada. *Political Psychology, 34,* 443-460. doi: http://dx.doi.org/10.1111/pops.12029

Bombay, A., Matheson, K., & Anisman, H. (2014). Appraisals of discriminatory events among adult offspring of Indian Residential School survivors: The influences of identity centrality and past perceptions of discrimination. *Cultural Diversity & Ethnic Minority Psychology, 20*(1), 75. doi: http://dx.doi.org/10.1037/a0033352

Bougie, E. & Senécal, S. (2010). Registered Indian children's school success and intergenerational effects of residential schooling in Canada. *The International Indigenous Policy Journal, 1*(1). doi: dx.doi.org/10.18584/iipj.2010.1.1.5

Cariboo Tribal Council. (1991). *The impact of the residential school.* Williams Lake: Cariboo Tribal Council.

Chrisjohn, R. D., Young, S.L., & Maraun, M. (2006). *The circle game: Shadows and substance in the Indian Residential School experience in Canada.* Penticton: Theytus Books Ltd.

Currie, J. (2008). *Healthy, wealthy, and wise: Socioeconomic status, poor health in childhood, and human capital development* (working paper 13987). Cambridge, MA: National Bureau of Economic Research.

Currie, J., & Moretti, E. (2003). Mother's education and the intergenerational transmission of human capital: Evidence from college openings. *Quarterly Journal of Economics, 118*(4), 1495-1532. doi: http://dx.doi.org/10.1162/003355303322552856

Dee, T., & Penner, E. (2016). The causal effects of cultural relevance: Evidence from an ethnic studies curriculum (No. w21865). Cambridge, MA: National Bureau of Economic Research. doi: http://dx.doi.org/10.3386/w21865

Deiter, C. (1999). *From our mothers' arms: The intergenerational impact of residential schools in Saskatchewan.* Toronto, Canada: United Church Publishing House.

De Witte, K., Cabus, S., Thyssen, G., Groot, W., & van den Brink, H. M. (2013). A critical review of the literature on school dropout. *Educational Research Review, 10,* 13-28. doi: http://dx.doi.org/10.1016/j.edurev.2013.05.002

Dohmen, T., Falk, A., Huffman, D., & Sunde, U. (2012). The intergenerational transmission of risk and trust attitudes. *The Review of Economic Studies, 79*(2), 645-677. doi: http://dx.doi.org/10.1093/restud/rdr027

Dunn, J., & Kendrick, C. (1982). *Sibling: Love, envy, and understanding*. Cambridge, MA: Harvard University Press. doi: http://dx.doi.org/10.4159/harvard.9780674330597

Elias, B., Mignone, J., Hall, M., Hong, S. P., Hart, L., & Sareen, J. (2012). Trauma and suicide behaviour histories among a Canadian Indigenous population: An empirical exploration of the potential role of Canada's residential school system. *Social Science & Medicine*, *74*(10), 1560-1569. doi: http://dx.doi.org/10.1016/j.socscimed.2012.01.026

Fairlie, R. W., Hoffmann, F., & Oreopoulos, P. (2011). *A community college instructor like me: Race and ethnicity interactions in the classroom* (No. w17381). Cambridge, MA: National Bureau of Economic Research. doi: http://dx.doi.org/10.3386/w17381

Farver, J. A. M. (1993). Cultural differences in scaffolding pretend play: A comparison of American and Mexican-American mother–child and sibling–child pairs. In K. MacDonald (Ed.), *Parent–child play: Descriptions and implications* (pp. 349–366). Albany, NY: SUNY.

Feir, D. (2013). Exploring the sources of Aboriginal earnings gaps in 1995 and 2005. *Canadian Public Policy, 39*(2), 309-334. doi: http://dx.doi.org/10.3138/CPP.39.2.309

Feir, D. (2015). *The intergenerational effect of forcible assimilation policy on education* (Departmental working paper). Unpublished manuscript, University of Victoria, Victoria, BC.

Ford, D. Y., & Harris, J. J. (1996). Perceptions and attitudes of Black students toward school, achievement, and other educational variables. *Child Development*, *67*(3), 1141-1152. doi: http://dx.doi.org/10.2307/1131884

Friesen, J., & Krauth, B. (2010). Sorting, peers, and achievement of Aboriginal students in British Columbia. *Canadian Journal of Economics*, *43*(4), 1273-1301. doi: http://dx.doi.org/10.1111/j.1540-5982.2010.01614.x

Gauthier, M. (2010). *The impact of the residential school, child welfare system and intergenerational trauma upon the incarceration of Aboriginals* (unpublished master's thesis). Faculty of Education, Queen's University, Kingston, ON.

George, P., & Kuhn, P. (1994). The size and structure of Native–White wage differentials in Canada. *Canadian Journal of Economics*, *27*(4), 20-42. doi: http://dx.doi.org/10.2307/135800

Glenn, C. (2011). American Indian/First Nations schooling: From the colonial period to present. New York: Palgrave MacMillian. doi: http://dx.doi.org/10.1057/9780230119512

Government of Ontario. (1976). *Summary report of the Task Force on the Educational Needs of Native Peoples of Ontario.* Toronto, ON: Author.

Greene, W. (2010). Testing hypotheses about interaction terms in nonlinear models. *Economics Letters*, *107*(2), 291-296. doi: http://dx.doi.org/10.1016/j.econlet.2010.02.014

Gresko, J. (1979). White 'rites' and Indian 'rites': Indian education and Native responses in the West. In D. C. Jones, N. M. Sheehan, & R. M. Stamp (Eds.), *Shaping the schools of the Canadian West* (pp.84-106). Calgary: Detselig.

Gunn, T. M., Pomahac, G., Striker, E. G., & Tailfeathers, J. (2011). First Nations, Métis, and Inuit education: The Alberta initiative for school improvement approach to improve Indigenous education in Alberta. *Journal of Educational Change, 12*(3), 323-345. doi: http://dx.doi.org/10.1007/s10833-010-9148-4

Haig-Brown, C. (1988). *Resistance and renewal: Surviving the Indian Residential School.* Vancouver: Tillacum Library.

Harper, S. (2008). Prime Minister Harper offers full apology on behalf of Canadians for the Indian Residential Schools System. Ottawa: Government of Canada. Retrieved from: https://www.aadnc-aandc.gc.ca/eng/1100100015644/1100100015649

Hawthorn, H. B. (1967). *A survey of the contemporary Indians of Canada: Economic, political, educational needs and policies* (Vol. 2). Ottawa: Indian Affairs Branch.

Hetherington, E. M. (1989). Coping with family transition: Winners, losers, and survivors. *Child Development, 60*, 1-14. doi: http://dx.doi.org/10.2307/1131066

Hoffmann, F., & Oreopoulos, P. (2009). A professor like me: The influence of instructor gender on college achievement. *Journal of Human Resources,44*(2), 479-494. doi: http://dx.doi.org/10.1353/jhr.2009.0024

Hudson, G., & MacDonald, D. B. (2012). The genocide question and Indian Residential Schools in Canada. *Canadian Journal of Political Science, 45*(2), 427-449. doi: http://dx.doi.org/10.1017/S000842391200039X

Jacobs, E., & White, L. (1992). *Liberating our children—Liberating our nations. Report of the Aboriginal Committee.* Victoria: Family and Children's Services Legislation Review Community Panel— Aboriginal Committee.

Johnston, P. (1983). *Native children and the child welfare system*. Toronto: James Lorimer Ltd.

Kanu, Y. (2007). Increasing school success among Aboriginal students: Culturally responsive curriculum or macrostructural variables affecting schooling? *Diaspora, Indigenous, and Minority Education, 1*(1), 21-41.

Karaca-Mandic, P., Norton, E. C., & Dowd, B. (2012). Interaction terms in nonlinear models. *Health Services Research, 47*(1.1), 255-274. doi: http://dx.doi.org/10.1111/j.1475-6773.2011.01314.x

King, D. P. (2006). *A brief report of the federal Government of Canada's Residential School System for Inuit.* Ottawa: *Aboriginal Healing Foundation.*

Kirmayer, L. J., Brass, G. M., & Tait, C. L. (2000). The mental health of Aboriginal peoples: Transformations of identity and community. *The Canadian Journal of Psychiatry, 45*(7), 607-616.

Mackay, R., & Myles, L. (1995). A major challenge for the education system: Aboriginal retention and dropout. In M. Battiste & J. Barman (Eds.), *First Nations education in Canada: The circle unfolds* (pp. 157-178). Vancouver: University of British Columbia Press.

Marks, G. (1998). *Attitudes to school life: Their influences and their effects on achievement and leaving school* (Longitudinal Surveys of Australian Youth Research Report Number 5). Victoria, Australia: The Australian Council for Educational Research.

McBride, S. R, & McKee, W. (2001). *Over-representation of Aboriginal students reported with behaviour disorders: A report to the Ministry of Education—British Columbia, Aboriginal Education Branch and Special Programs Branch.* British Columbia: Ministry of Education.

McFarlane, K.A. (1999). *Educating First Nation children in Canada: The rise and fall of residential schooling* (Unpublished master's thesis). Queen's University, Kingston, ON.

Milevsky, A. (2005). Compensatory patterns of sibling support in emerging adulthood: Variations in loneliness, self-esteem, depression and life satisfaction. *Journal of Social and Personal Relationships, 22*(6), 743-755. doi: http://dx.doi.org/10.1177/0265407505056447

Milevsky, A., & Levitt, M. J. (2005). Sibling support in early adolescence: Buffering and compensation across relationships. *European Journal of Developmental Psychology, 2*(3), 299-320. doi: http://dx.doi.org/10.1080/17405620544000048

Miller, J. R. (1996). *Shingwauk's vision: A history of Native residential schools*. Toronto: University Toronto Press.

Miller, J. R. (2004). *Lethal legacy: Current Native controversies in Canada.* Toronto: McClelland and Steward Ltd.

Milloy, J. (1999). *A National crime: The Canadian government and the Residential School System, 1879 to 1986.* Winnipeg: The University of Manitoba Press.

Morrison, G. M., Anthony, S., Storino, M. H., Cheng, J. J., Furlong, M. J., & Morrison, R. L. (2001). School expulsion as a process and an event: Before and after effects on children at risk for school discipline. *New Directions for Youth Development*, 92, 45-71. doi: http://dx.doi.org/10.1002/yd.23320019205

Mota, N., Elias, B., Tefft, B., Medved, M., Munro, G., & Sareen, J. (2012). Correlates of suicidality: Investigation of a representative sample of Manitoba First Nations adolescents. *American Journal of Public Health, 102*(7), 1353-1361. doi: http://dx.doi.org/10.2105/AJPH.2011.300385

National Indian Brotherhood. (1980). *Indian control of Indian education*. Winnipeg: Author.

Nuu-Chah-Nulth Tribal Council. (1996). *Indian Residential Schools: The Nuu-chah-nulth experience.* Port Alberni: Author.

O'Gorman, M., & Pandey, M. (2015). Explaining low high school attainment in Northern Aboriginal Communities: An analysis of the Aboriginal People's surveys. *Canadian Public Policy, 41*(4), 156-165. doi: http://dx.doi.org/10.3138/cpp.2015-002

Ontario Ministry of Education. (2011). *Safe schools—Suspensions and expulsions facts 2003-2004.* Retrieved from http://www.edu.gov.on.ca/eng/document/nr/05.11/bg1123.html

Presbyterian Archives. (2010). *The Presbyterian Church in Canada archives: Guide to records relating to the residential schools.* Retrieved from http://www.presbyterianarchives.ca/RS%20-%20FA-Residential%20Schools%20Thematic%20Guide.pdf

Reimer, G. (2010). *The Indian Residential Schools Settlement Agreement's Common Experience Payment and healing: A qualitative study exploring impacts on recipients.* Ottawa: Aboriginal Healing Foundation. Retrieved from http://Indigenouspeoplesissues.com/attachments/article/4655/4655_cep-healing.pdf

Richards, J., Hove, J., & Afolabi, K. (2008, June). *Explaining the Aboriginal–non-Aboriginal gap in student performance in BC schools*. Presented at Annual Meeting of the Canadian Economics Association, Vancouver, British Columbia.

Richards, J., & Scott, M. (2009). *Indigenous education: Strengthening the foundations* (Canadian Policy Research Networks Research Report). Retrieved from http://cprn.org/documents/51984_FR.pdf

Royal Commission on Aboriginal Peoples (RCAP). (1997). Residential schools (chapter 10). In *Report of the Royal Commission on Aboriginal Peoples. Vol. 1: Looking Forward Looking Back. Part Two: False Assumptions and a Failed Relationship* [CD-ROM]. Ottawa: Libraxus.

Rutter, M. (1990). Psychosocial resilience and protective mechanisms. In J. Rolf, A. S. Masten, D. Cicchetti, K. H. Nuechterlein, & S. Weintraub (Eds.), *Risk and protective factors in the development of psychopathology* (pp. 181–214). New York: Cambridge University Press. doi: http://dx.doi.org/10.1017/CBO9780511752872.013

Sandler, I. N. (1980). Social support resources, stress, and maladjustment of poor children. *American Journal of Community Psychology, 8,* 41–52. doi: http://dx.doi.org/10.1007/BF00892280

Sellers, R. M., & Shelton, J. N. (2003). The role of racial identity in perceived racial discrimination. *Journal of Personality and Social Psychology, 84*(5), 1079-1092. doi: http://dx.doi.org/10.1037/0022-3514.84.5.1079

Sharpe, A., Arsenault, J. F., Lapointe, S., & Cowan, F. (2009). *The effect of increasing Aboriginal educational attainment on the labour force, output and the fiscal balance* (No. 2009-03). Ottawa: Centre for the Study of Living Standards.

Silver, J., Mallet, K., Greene, J., & Simard, F. (2002). *Aboriginal education in Winnipeg inner city high schools.* Ottawa: Canadian Centre for Policy Alternatives.

Sinha, V., & Leduc, Y. (2011). *Geographic boundaries and child populations served by First Nations and provincial/territorial child welfare agencies* (Internal technical report). First Nations component of the Canadian Incidence Study of Reported Child Abuse and Neglect (FNCIS-2008).

Smith, A. (2009, May). *Indigenous Peoples and boarding schools: A comparative study.* Paper presented at the Permanent Forum on Indigenous Issues Eighth session, New York.

Smith, D., Varcoe, C., & Edwards, N. (2005). Turning around the intergenerational impact of residential schools on Aboriginal people: Implications for health policy and practice. *Canadian Journal of Nursing Research, 37*(4), 38-60.

Statistics Canada. (2003a). *Aboriginal Peoples Survey 2001—Initial findings: Well-being of the non-reserve Indigenous population* [Catalogue no. 89-589-XIE]. Ottawa: Statistics Canada.

Statistics Canada (2003b). *Aboriginal Peoples Survey 2001: Concepts and methods guide* [Catalogue no. 89-591-XIE]. Ottawa: Statistics Canada.

Statistics Canada. (2006). *Aboriginal Peoples technical report, 2006 Census* (2nd ed.) [Catalogue no. 92-569-XWE]. Ottawa: Statistics Canada

Stonefish, B. (2007). *Moving beyond: Understanding the impacts of residential school.* Owen Sound: Ningwakwe Learning Press.

Stout, R., & Peters, S. (2011). *Kiskinohamâtôtâpânâsk: Inter-generational effects on professional First Nations women whose mothers are residential school survivors.* Winnipeg: Prairie Women's Centre for Research. Retrieved from http://www.pwhce.ca/pdf/ kiskino.pdf

Szaz, M. C. (2006). Through a wide angle lens: Acquiring and maintaining power, position, and knowledge through boarding schools. In C. E. Trafzer, J. A. Keller, & L. Sisquoc (Eds.), *Boarding school blues: Revisiting American Indian educational experiences.* Omaha: University of Nebraska Press.

Talaga, Tanya. (2015, October 7). Thunder Bay high school is home away from home for First Nations students, inquest told. *The Star.* Retrieved from: http://www.thestar.com/news/canada/2015/10/07/thunder-bay-high-school-is-home-away-from-home-for-first-nations-students-inquest-told.html

Tobin, T. J., & Sugai, G. M. (1999). Using sixth-grade school records to predict school violence, chronic discipline problems, and high school outcomes. *Journal of Emotional and Behavioral Disorders, 7*, 40-53. doi: http://dx.doi.org/10.1177/106342669900700105

Truth and Reconciliation Commission of Canada (TRC). (2012). *They came for the children: Canada, Indigenous Peoples, and residential schools.* Winnipeg: Author.

Truth and Reconciliation Commission of Canada (TRC). (2015). *Honouring the truth, reconciling for the future: Summary of the final report of the Truth and Reconciliation Commission of Canada.* Retrieved from http://www.trc.ca/websites/trcinstitution/File/2015/Findings/Exec_Summary_2015_05_31_web_o.pdf

Wald, J., & Losen, D. J. (2003). Defining and redirecting the school-to-prison pipeline. *New Directions for Student Leadership, 99,* 9-15.

White, J. P., Maxim, P., & Spence, N. D. (2004). An examination of educational success. In J. White, P. Maxim, & D. Beavon (Eds.), *Aboriginal policy research: Setting the agenda for change* (Vol. 1, pp. 129-145). Toronto: Thompson Educational Publishing.

Appendix

Table A1. Variable List and Description

Variable List	Explanation
Dependent Variables	
Repeat a grade	Equals 1 if the child has ever repeated a grade and zero otherwise
Award for grades	Equals 1 if the child has ever received an award for their grades and zero otherwise
Award for other	Equals 1 if the child has ever received an award at school for something other than his or her grades and zero otherwise
Suspended or expelled	Equals 1 if the child has ever been suspended or expelled and zero otherwise
Get along with teachers very well	Equals 1 if the parent answered that the child got along with his or her teachers "very well, no problems" and zero otherwise
Likes school often or more	Equals 1 if the parent answered the child looked forward to going to school "often" or "almost always"
Independent Variables	
Mother's sibling attended residential school	Equals 1 if the mother had a sibling that attended residential school and zero otherwise
Child speaks or understands an Aboriginal language	Equals 1 if the child speaks or understands an Aboriginal language and zero otherwise
Mother believes Aboriginal language knowledge is very important	Equals 1 if the mother responded that her child knowing an Aboriginal language is "very important" and zero otherwise
Child's mother tongue is an Aboriginal language	Equals 1 if the child's mother tongue is Aboriginal language and zero otherwise
Child speaks an Aboriginal language at home	Equals 1 if the child speaks an Aboriginal language at home and zero otherwise
Child is a Registered Indian	Equals 1 if the child is registered under the Indian Act and zero otherwise
The child has only Aboriginal ancestry	Equals 1 if the child's ancestry is only Aboriginal and zero otherwise (determined using a derived variable in the APSCY on Aboriginal ancestry)
Mother has a high school diploma or more	Equals 1 if the mother's highest level of schooling is a high school diploma or more and zero otherwise
Mother has a bachelor's degree or more	Equals 1 if the mother's highest level of school is a bachelor's degree or more and zero otherwise
Child lives on reserve	Equals 1 if a child lives on a reserve and zero otherwise
Child is in a two parent family	Equals 1 if a child has two parents in the household and zero otherwise
Six or more live in same house as child	Equals 1 if six or more people live in the same house as the child and zero otherwise
Dwelling of child in need of repair	Equals 1 if the child lives in a dwelling in need of repair and zero otherwise
Child eats breakfast every day	Equals 1if the child eats breakfast every day and zero otherwise

(continued)

Table A1. Variable List and Description (continued)

Variable List	Explanation
Child's paternal grandmother is Aboriginal	Equals 1 if the child's paternal grandmother is Aboriginal
Child's paternal grandfather is Aboriginal	Equals 1 if the child's paternal grandfather is Aboriginal
Child's maternal grandmother is Aboriginal	Equals 1 if the child's maternal grandmother is Aboriginal
Child's maternal grandfather is Aboriginal	Equals 1 if the child's maternal grandfather is Aboriginal
Child lives in Ontario	Equals 1 if the child lives in Ontario and zero otherwise
Child lives in Manitoba	Equals 1 if the child lives in Manitoba and zero otherwise
Child lives in Saskatchewan	Equals 1 if the child lives in Saskatchewan and zero otherwise
Child lives in Alberta	Equals 1 if the child lives in Alberta and zero otherwise
Child lives in British Columbia	Equals 1 if the child lives in British Columbia and zero otherwise
Number of siblings of child	The number of siblings that the child is living with
Economic family income of child	The economic family income (census defined economic family)
Age of child	Age of the child
Age of parent	Age of the mother
Child is female	Equals 1 if the child is female and zero otherwise

Table A2. School Experience of Children with Experience Treated as Categorical or Continuous Variable

	Ordinary Least Squares							
	Get Along Well with Teachers				Likes School			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
Mother attended residential school	**-0.118**	**-0.095**	**-0.153***	**-0.162****	**-0.239***	**-0.263***	**-0.424****	**-0.421****
	(0.073)	**(0.078)**	**(0.079)**	**(0.078)**	**(0.131)**	**(0.136)**	**(0.171)**	**(0.172)**
Gender of child	0.154***	0.155***	0.154***	0.154***	0.287***	0.293***	0.291***	0.285***
	(0.037)	(0.037)	(0.037)	(0.037)	(0.055)	(0.055)	(0.055)	(0.055)
Age of child	-0.061***	-0.062***	-0.062***	-0.061***	-0.076***	-0.077***	-0.076***	-0.075***
	(0.008)	(0.008)	(0.008)	(0.008)	(0.011)	(0.011)	(0.011)	(0.011)
Age of mother	0.005*	0.005	0.004	0.005*	0.009**	0.01**	0.009**	0.008*
	(0.003)	(0.003)	(0.003)	(0.003)	(0.005)	(0.004)	(0.004)	(0.005)
Child's maternal grandmother is Aboriginal		0.047	0.042			0.048	0.034	
		(0.065)	(0.064)			(0.081)	(0.082)	
Child's paternal grandfather is Aboriginal		-0.077	-0.078			-0.103	-0.107	
		(0.063)	(0.063)			(0.099)	(0.098)	
Child's paternal grandfather is Aboriginal		0.056	0.053			0.278***	0.27***	
		(0.057)	(0.057)			(0.09)	(0.09)	
Child's maternal grandfather is Aboriginal		-0.162***	-0.168***			-0.031	-0.047	
		(0.06)	(0.061)			(0.086)	(0.083)	
Mother's sibling attended residential school			0.095*	0.069			0.264***	0.284***
			(0.054)	(0.053)			(0.096)	(0.1)
Adjusted *R*-squared	0.048	0.054	0.054	0.055	0.056	0.066	0.066	0.071

(continued)

Table A2. School Experience of Children with Experience Treated as Categorical or Continuous Variable (continued)

	Ordered Probit							
	Get Along Well with Teachers				Like School Often or More			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
Mother attended residential school	-0.171 (0.108)	-0.128 (0.118)	-0.220* (0.117)	-0.237** (0.114)	-0.231* (0.136)	-0.246* (0.14)	-0.445*** (0.171)	-0.447*** (0.17)
Gender of child	0.241*** (0.058)	0.243*** (0.057)	0.242*** (0.057)	0.240*** (0.058)	0.348*** (0.064)	0.356*** (0.064)	0.354*** (0.063)	0.346*** (0.064)
Age of child	-0.091*** (0.012)	-0.093*** (0.012)	-0.093*** (0.012)	-0.091*** (0.012)	-0.090*** (0.013)	-0.092*** (0.013)	-0.091*** (0.013)	-0.090*** (0.013)
Age of mother	0.009* (0.005)	0.007 (0.005)	0.006 (0.005)	0.008 (0.005)	0.012** (0.006)	0.013** (0.006)	0.011** (0.006)	0.011* (0.006)
Child's maternal grandmother is Aboriginal		0.037 (0.102)	0.029 (0.102)			0.021 (0.096)	0.003 (0.096)	
Child's paternal grandmother is Aboriginal		-0.148 (0.103)	-0.151 (0.103)			-0.129 (0.115)	-0.137 (0.115)	
Child's paternal grandfather is Aboriginal		0.101 (0.093)	0.098 (0.093)			0.303*** (0.105)	0.295*** (0.106)	
Child's maternal grandfather is Aboriginal		-0.255*** (0.099)	-0.263*** (0.1)			-0.04 (0.100)	-0.058 (0.098)	
Mother's sibling attended residential school			0.150* (0.087)	0.104 (0.084)			0.334*** (0.111)	0.348*** (0.113)
Last Cut off								
Constant	-3.492*** (0.240)	-3.751*** (0.261)	-3.786*** (0.264)	-3.502*** (0.240)	-2.098*** (0.232)	-2.059*** (0.253)	-2.138*** (0.246)	-2.138*** (0.228)
Fourth Cut off								
Constant	-2.639*** (0.217)	-2.897*** (0.239)	-2.931*** (0.241)	-2.649*** (0.217)	-1.790*** (0.223)	-1.747*** (0.244)	-1.823*** (0.239)	-1.827*** (0.220)
Third Cut off								
Constant	-1.677*** (0.210)	-1.930*** (0.235)	-1.963*** (0.238)	-1.686*** (0.210)	-1.101*** (0.227)	-1.051*** (0.250)	-1.125*** (0.246)	-1.135*** (0.225)

(continued)

Table A2. School Experience of Children with Experience Treated as Categorical or Continuous Variable (continued)

	Ordered Probit							
	Get Along Well with Teachers				Like School Often or More			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
Fourth Cut off								
Constant	-0.942*** (0.213)	-1.191*** (0.237)	-1.224*** (0.239)	-0.951*** (0.214)	-0.536** (0.225)	-0.483* (0.247)	-0.556** (0.244)	-0.569** (0.223)
Pseudo *R*-squared	0.025	0.030	0.030	0.026	0.027	0.031	0.034	0.030
Model Chi-Squared	114.6614	139.1055	140.8254	115.4781	114.2142	133.3376	151.0993	133.5584
Categories	5	5	5	5	5	5	5	5
Log Likelihood	-40053.7	-39874	-39850	-40041.9	-43886	-43713.9	-43600.3	-43758.9
N	~5,000	~5,000	~5,000	~5,000	~5,000	~5,000	~5,000	~5,000

Note. This table reports the coefficients associated with each variable on the left either on the measures "getting along with teachers," and "looking forward to going to school." Higher numbers associated with these numbers means either more frequently gets along with teachers or looks forward to going to school more often. The effect's robust standard error is given in parentheses. All specifications include a set of dummy variables for the child's region of residence. The region of residence is divided into northern and southern regions of each province in order to account for the different geography in the more northern area of provinces, which tend to be more remote. This division groups together census divisions above the 52-degree latitude and those below. I also include an additional category for the coastal region of British Columbia so there are 11 regions in total and the omitted category is the northern half of British Columbia. The estimates of the geography variables are not reported.
The asterisks indicate the level of significance: * $p < .10$, ** $p < .05$, *** $p < .01$